AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

S. Hrg. 110–705

HIGH PRICE OF COMMODITIES—2008

HEARINGS

BEFORE THE

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

MAY 7, 2008
FUEL SUBSIDIES:
IS THERE AN IMPACT ON FOOD SUPPLY AND PRICES?

MAY 20, 2008
FINANCIAL SPECULATION IN COMMODITY MARKETS:
ARE INSTITUTIONAL INVESTORS AND HEDGE FUNDS
CONTRIBUTING TO FOOD AND ENERGY PRICE INFLATION?

JUNE 24, 2008
ENDING EXCESSIVE SPECULATION IN COMMODITY MARKETS:
LEGISLATIVE OPTIONS

Available via http://www.gpoaccess.gov/congress/index.html

Printed for the use of the
Committee on Homeland Security and Governmental Affairs

HIGH PRICE OF COMMODITIES—2008

S. Hrg. 110–705

HIGH PRICE OF COMMODITIES—2008

HEARINGS

BEFORE THE

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

MAY 7, 2008
FUEL SUBSIDIES:
IS THERE AN IMPACT ON FOOD SUPPLY AND PRICES?

MAY 20, 2008
FINANCIAL SPECULATION IN COMMODITY MARKETS:
ARE INSTITUTIONAL INVESTORS AND HEDGE FUNDS
CONTRIBUTING TO FOOD AND ENERGY PRICE INFLATION?

JUNE 24, 2008
ENDING EXCESSIVE SPECULATION IN COMMODITY MARKETS:
LEGISLATIVE OPTIONS

Available via http://www.gpoaccess.gov/congress/index.html

Printed for the use of the
Committee on Homeland Security and Governmental Affairs

U.S. GOVERNMENT PRINTING OFFICE

43–084 PDF WASHINGTON : 2010

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2250 Mail: Stop SSOP, Washington, DC 20402–0001

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

JOSEPH I. LIEBERMAN, Connecticut, *Chairman*

CARL LEVIN, Michigan
DANIEL K. AKAKA, Hawaii
THOMAS R. CARPER, Delaware
MARK L. PRYOR, Arkansas
MARY L. LANDRIEU, Louisiana
BARACK OBAMA, Illinois
CLAIRE MCCASKILL, Missouri
JON TESTER, Montana

SUSAN M. COLLINS, Maine
TED STEVENS, Alaska
GEORGE V. VOINOVICH, Ohio
NORM COLEMAN, Minnesota
TOM COBURN, Oklahoma
PETE V. DOMENICI, New Mexico
JOHN WARNER, Virginia
JOHN E. SUNUNU, New Hampshire

MICHAEL L. ALEXANDER, *Staff Director*
RYAN MCCORMICK, *Legislative Assistant, Office of Senator Joseph I. Lieberman*
ELLEN COHEN, *Fellow, Office of Senator Joseph I. Lieberman*
SEAMUS A. HUGHES, *Deputy Press Secretary*
BRANDON L. MILHORN, *Minority Staff Director and Chief Counsel*
ASHA A. MATHEW, *Minority Counsel*
CLARK T. IRWIN, *Minority Professional Staff Member*
AMY B. CARROLL, *Minority Professional Staff Member*
TRINA DRIESSNACK TYRER, *Chief Clerk*
PATRICIA R. HOGAN, *Publications Clerk and GPO Detailee*
LAURA W. KILBRIDE, *Hearing Clerk*

CONTENTS

Opening statements: Page
Senator Lieberman 1, 31, 75
Senator Collins 3, 33, 77
Senator Carper 4, 65, 111
Senator Sununu 22
Senator Coburn 24, 54
Senator Levin 36, 99
Senator Pryor 58
Senator McCaskill 63, 105
Senator Coleman 102
Senator Warner 108
Prepared statement:
Senator Lieberman for May 7 hearing 119
Senator Collins for May 7 hearing 120
Senator McCaskill for May 7 hearing 121
Senator Stevens for June 24 hearing 122

WITNESSES

WEDNESDAY, MAY 7, 2008

Andrew Siegel, Vice President and Treasurer, When Pigs Fly, Inc. 5
Bruce A. Babcock, Ph.D., Director, Center for Agricultural and Rural Development, Iowa State University 6
Rev. David Beckmann, President, Bread for the World 10
Mark W. Rosegrant, Ph.D., Director, Environment and Production Technology Division, International Food Policy Research Institute 12

TUESDAY, MAY 20, 2008

Jeffrey H. Harris, Chief Economist, U.S. Commodity Futures Trading Commission 37
Michael W. Masters, Managing Member and Portfolio Manager, Masters Capital Management, LLC 40
Thomas J. Erickson, Chairman, Commodity Markets Council 43
Benn Steil, Ph.D., Senior Fellow and Director of International Economics, Council on Foreign Relations 46
Tom Buis, President, National Farmers Union 48

TUESDAY, JUNE 24, 2008

Hon. Walter L. Lukken, Acting Chairman, U.S. Commodity Futures Trading Commission 79
Hon. James E. Newsome, President and Chief Executive Officer, NYMEX Holdings, Inc. 83
Michael W. Masters, Managing Member and Portfolio Manager, Masters Capital Management, LLC 85
William F. Quinn, Chairman, Committee on Investment of Employee Benefit Assets 88
James J. Angel, Ph.D., CFA, Associate Professor of Finance, McDonough School of Business, Georgetown University 90
Michael Greenberger, Professor, School of Law, University of Maryland 92

Page

Alphabetical List of Witnesses

Angel, James J., Ph.D., CFA:
Testimony 90
Prepared statement 268
Babcock, Bruce A., Ph.D.:
Testimony 6
Prepared statement with an attachment 156
Beckmann, Rev. David:
Testimony 10
Prepared statement 162
Buis, Tom:
Testimony 48
Prepared statement 219
Erickson, Thomas J.:
Testimony 43
Prepared statement 208
Greenberger, Michael:
Testimony 92
Prepared statement 278
Harris, Jeffrey H.:
Testimony 37
Prepared statement 170
Lukken, Hon. Walter L.:
Testimony 79
Prepared statement 222
Masters, Michael W.:
Testimony on May 20 40
Prepared statement with an attachment 191
Testimony on June 24 85
Prepared statement 246
Newsome, Hon. James E.:
Testimony 83
Prepared statement 232
Quinn, William F.:
Testimony 88
Prepared statement 264
Rosegrant, Mark W., Ph.D.:
Testimony 12
Prepared statement 166
Siegel, Andrew:
Testimony 5
Prepared statement 153
Steil, Benn, Ph.D.:
Testimony 46
Prepared statement 212

APPENDIX

Charts submitted by Senator Collins 124
General Motors Press Releases submitted by Senator Carper 128
Charts submitted by Senator Levin 134
Charts submitted for the Record by Mr. Masters 137
Charts submitted for the Record by Mr. Lukken 139
Joint Analysis prepared by Majority and Minority Staffs of the Permanent Subcommittee on Investigations 142
Additional prepared statements submitted for the Record from:
American Farm Bureau Federation 289
Governor M. Jodi Rell, State of Connecticut 299
American Cotton Shippers Association 306
National Grain and Feed Association 314
American Benefits Council 321
Council of Institutional Investors 324
IntercontintentalExchange, Inc. (ICE) 326
Responses to Post-Hearing Questions for the Record on May 7 from:
Mr. Babcock 332
Mr. Beckmann 337
Mr. Rosegrant 339

Page

Responses to Post-Hearing Questions for the Record on May 20 from:
Mr. Harris 344
Mr. Masters 348
Mr. Erickson 349
Mr. Steil 351
Mr. Buis 352
Responses to Post-Hearing Questions for the Record on June 24 from:
Mr. Lukken 353
Mr. Newsome 364
Mr. Masters 369
Mr. Greenberger 371
Mr. Angel 382

FUEL SUBSIDIES: IS THERE AN IMPACT ON FOOD SUPPLY AND PRICES?

WEDNESDAY, MAY 7, 2008

U.S. SENATE,
COMMITTEE ON HOMELAND SECURITY
AND GOVERNMENTAL AFFAIRS,
Washington, DC.

The Committee met, pursuant to notice, at 10:01 a.m., in Room SD–342, Dirksen Senate Office Building, Hon. Joseph I. Lieberman, Chairman of the Committee, presiding.

Present: Senators Lieberman, Carper, Pryor, McCaskill, Collins, Coburn, and Sununu.

OPENING STATEMENT OF CHAIRMAN LIEBERMAN[1]

Chairman LIEBERMAN. Good morning and welcome to our hearing today. This is the first of at least two hearings this Committee will hold to examine the current rapid increase in the price of food that is occurring here in the United States and across the globe, to consider actions the Federal Government should take to alleviate the pressure these high prices have imposed on America's families and businesses. I want to thank Senator Collins for her suggestion that we hold these hearings on this issue, which is of such everyday genuine concern to so many millions of Americans and people throughout the world.

The specific issue that we are going to examine today is the effect of Federal Government subsidies for ethanol on the current food price crisis. Our next hearing will occur within a couple of weeks, and on that occasion we will focus on the question of whether speculators are driving up commodity prices.

Food prices in the United States rose 4 percent last year and are predicted to rise at least 4 percent, perhaps 5 percent, this year. These are the largest increases in annual food prices since 1990, 18 years. Of course, any of these increases disproportionately affect people in relation to their income. Middle-income families are squeezed, particularly as gas prices are also rising at the same time, and other costs, like health care, are rising and shrinking disposable income. Lower-income consumers are hit hardest because their food expenditures make up a larger share of their total household expenses.

Here is an interesting set of numbers, I think. Overall, American households spend 12.6 percent of their income on food. But low-in-

[1] The prepared statement of Senator Lieberman appears in the Appendix on page 119.

come households spend 17.1 percent on food. So you can see the impact.

The World Bank reports that global food prices have increased 83 percent in the last 3 years. That is a devastating rate of inflation. When you apply some of those same statistics I mentioned to families abroad, families in Nigeria spend an average of 73 percent of their income on food, Vietnamese spend 65 percent, and Indonesians spend about 50 percent on food.

When you add in an 83 percent increase over the last 3 years, you can see why people are suffering. In fact, as we know from the news, people have actually already died in food riots in, for example, Somalia.

Bob Zoellick, who is the President of the World Bank, recently warned that 33 other countries are not just suffering hunger, malnutrition, in some cases starvation, certainly stress as a result of the increase in food prices, but that 33 nations are at risk of societal unrest as a result of the food price increase and food shortage, and one billion Asians are at risk of hunger or malnutrition.

There are many explanations of how this crisis came to be and it is our intention in this oversight Committee to explore the various explanations or suggestions and try to judge the merit of them to inform our own legislative behavior. This Committee has the unique ability to look across the Federal Government to assess the range of policies that influence food prices. This is now the Homeland Security and Governmental Affairs Committee, but the Governmental Affairs responsibility that we have, which is the historic responsibility of the Committee, is an oversight Committee not just focused on a particular department but on the overall government. That is why the questions that we will discuss today, we hope, will have the potential to influence debates that will occur on the floor of the Senate and the House and at the White House on the best way for Congress to respond to this global food crisis.

In regard to the question we are focusing on, I was thinking about the old quote from Pogo, which is a cartoon we don't see much anymore, but the famous Pogo quote said, "We have met the enemy and it is us." It may be that when it comes to ethanol and the increase in corn prices, that we have met the problem and we caused it: Not with bad intentions, but as everyone knows, in an effort to promote American energy independence and help reduce greenhouse gas emissions that are causing global warming. Congress has required a five-fold increase in renewable fuels, which in turn led to an increase in demand for corn and a further decrease in supplies of wheat and soybeans as farmland that traditionally was used to grow those crops has been converted to the more profitable corn crops.

So our question for this excellent group of witnesses we have today is, bottom line, did this change in policy by the Federal Government for a good reason cause this bad consequence, which is rising food prices, and if it did, to what extent is it the cause? Is it the sole cause, or is it a minor cause as compared to other causes?

We hold a lot of hearings in this Committee. This probably is as significant as any we have ever done to more people in the world and the way they live every day. So again, in introducing Senator

Collins to deliver her opening statement, I want to thank her for being the impetus to this series of hearings that we begin today.

Senator Collins.

PREPARED STATEMENT OF SENATOR COLLINS [1]

Senator COLLINS. Thank you, Mr. Chairman, and thank you so much for agreeing to look into this important issue.

Today, we consider whether a change in American agricultural policy that was aimed at reducing our reliance on imported oil may instead be having serious unintended consequences for food supplies and prices. According to the World Bank, as the Chairman has indicated, global food prices have increased by 83 percent in the past 3 years. Here in the United States, as the chart before you shows,[2] an analysis of April 2008 prices shows an even more remarkable one-year trend of increases. Wheat, for example, is up by 95 percent. Soybeans are up by 83 percent. Corn, up by 66 percent. And oats, up by 47 percent.

Such increases in basic commodities naturally work themselves through the food supply chain. According to the U.S. Department of Agriculture (USDA), consumer prices for all foods increased by 4 percent last year, and as the Chairman pointed out, that is the highest annual rate increase since 1990. Furthermore, the Department projects continued increases.

The consequences have reached far beyond data cells on some spreadsheet. They affect families who are forced to cut back on bread, meat, and dairy purchases and to apply their economic stimulus checks to their grocery bills. The nutritional threat, especially to very low-income families with children, or to senior citizens living on fixed incomes, is clear. The high prices and shortages also hurt small businesses, like a Maine family bakery, whose future is less secure due to escalating costs.

The global consequences are also grim. As the Chairman indicated, the President of the World Bank has identified some 33 countries around the world that face potential social unrest because of the enormous hike in food and energy prices. For these countries where the consumption of food comprises half to three-quarters of all the consumption, there is literally no margin for survival. The impact of rising prices, food shortages, and export restrictions has had devastating consequences for the billion people around the world who live in dire poverty.

We need a clear view of how biofuel prices shape this troubling picture. So again, I am so pleased that the Chairman has agreed to have the Committee carefully examine this important issue.

Subsidies for ethanol production, tariffs on ethanol imports, and mandates for ethanol use have certainly had an impact on the U.S. corn crop. In 1997, as this chart demonstrates, only 5 percent of the corn harvest was used for ethanol production. That portion grew to 20 percent of the 2006 harvest. The Department of Agriculture estimates that 24 percent of last year's corn crop is being used for ethanol and that ethanol's claim on the 2008 harvest will climb to 33 percent. So just look at that astonishing change, from

[1] The prepared statement of Senator Collins appears in the Appendix on page 120.
[2] The charts submitted by Senator Collins appear in the Appendix on page 124.

5 percent in 1997 to a third of the corn crop next year being diverted to ethanol.

Not surprisingly, increased demand for corn-based ethanol has diverted acreage from crops like wheat and soybeans to corn and has had ripple effects on the cost of feed for livestock. The USDA's long-term projections released in February note that the strong expansion of corn-based ethanol production affects virtually every aspect of the field crop sector, from domestic demand and exports to prices and allocation of acreage among crops. After 2008, the USDA believes that the high returns for corn crops will lead to still further reductions in wheat and soybean planting. As our witness from Maine, who runs a family bakery, will attest, such changes in the use of distant crop lands can have profound local effects.

Certainly, American and European policies that promote corn or other food crops for ethanol are not the only factors in the sharp increase in food prices. Other factors include higher food demand in developing countries, higher energy and fertilizer costs, and weather events, like the drought in Australia. But most of those factors are beyond the control of mankind, much less governments. By contrast, however, biofuel subsidies and mandates are within the control of government and the International Food Policy Research Institute estimates that, globally, biofuels development may account for a quarter to a third of the increased costs of food.

Therefore, it is incumbent upon us to examine the impact that American biofuel policy is having on the global food crisis and whether our policy needs to be adjusted to mitigate the unintended consequences in the United States and elsewhere. This is not an abstract matter of public policy. It affects the poorest people in our country and around the world. It affects our bakeries, our markets, our restaurants, and our family kitchens here and around the world.

I look forward to hearing today's witnesses and to obtaining their assistance in helping us better understand the trade-offs inherent in our current biofuels policy.

Thank you, Mr. Chairman.

Chairman LIEBERMAN. Thanks, Senator Collins, for that excellent statement. Your graphs and your statement really made the case for why this hearing is so important.

Senator Carper has asked to be recognized to make a statement.

OPENING STATEMENT OF SENATOR CARPER

Senator CARPER. Just very briefly. I know we don't do opening statements beyond you and the Ranking Member. Thank you for doing this. This is a great hearing, timely and very important.

I met with some folks from General Motors (GM) this week and they shared with me that they have taken an equity position in two companies, brand new, very promising technology with respect to creating biofuels in a way that provides a lot more energy density, in a way that uses a whole lot less water to create, and it is just some very promising ideas. There is a lot of cutting edge stuff that is going on like this at the DuPont Company, as you may recall.

I would just ask unanimous consent to be able to include in the record at this point some information, press reports that deal with these encouraging developments. Thank you.[1]

Chairman LIEBERMAN. Thank you, Senator Carper. Without objection, we will do that.

We will go to the witnesses, and our first witness is Andrew Siegel, who is the owner of the When Pigs Fly Bakery in York, Maine. We have asked Dr. Siegel to discuss how rapidly rising commodity prices have negatively impacted his business, but before you do that, we all want to know what the other part of the sentence is. When Pigs Fly, what? [Laughter.]

Mr. SIEGEL. The other part was, you will be paying your bills when pigs fly by baking loaves of bread.

Chairman LIEBERMAN. Go right ahead.

TESTIMONY OF ANDREW SIEGEL,[2] VICE PRESIDENT AND TREASURER, WHEN PIGS FLY, INC.

Mr. SIEGEL. Good morning. I am here actually to tell my brief story. I do own When Pigs Fly Bakery with my brother and it is 15 years old. We started out in the beginning baking about 100 loaves of bread a day and selling them to a few local accounts. Currently, we deliver bread to approximately 250 supermarkets in Maine, New Hampshire, Massachusetts. We have some presence in Connecticut, Rhode Island, New York, and New Jersey. We have also opened five of our company stores where we deliver bread fresh 7 days a week, and we also have an Internet Website where people can order bread throughout the country.

What has happened actually from 1993 all the way up until current, there are a lot of challenges with running any kind of business. The challenges that we face are pretty much how to make a quality product and get it to our customers at a reasonable price, and the dynamics of that have changed significantly in the last probably year and a half.

Over the past 18 months, prices of every food product have increased anywhere in the neighborhood of 50 to 100 percent, and owning a bakery, because we use flour as our main ingredient, we have really felt the brunt there. But we also bake with propane. We deliver our bread in diesel trucks and gas trucks. And the breads themselves have lots of fruits, seeds, and nuts, and again, prices have increased significantly.

Back in September, our price of flour—we go through probably about 50,000 pounds of flour a week right now, so in dollar terms, the flour was costing us $7,700 a week. In October, it had risen to about $9,600 a week. And then December came along and it went to over $12,000 a week.

I talked to our flour distributor and he had mentioned what he thought some of the concerns were, ethanol being one, and also some other items, but he said that there is a good chance that we might not have enough flour to get through until the next crop comes in, and that is when things got really crazy.

---

[1] The General Motors Press Releases submitted by Senator Carper appear in the Appendix on page 128.

[2] The prepared statement of Mr. Siegel appears in the Appendix on page 153.

I think the first chart had shown that by the end of April, wheat was up 99 percent, and in February at one point, it was up 300 percent. There were a lot of rumors flying around. We ended up buying our flour upwards of about $22,000 per truckload all the way from $7,000, and what has that done for us? I mean, we have actually gone out and we have raised our prices. People in the bakery, they work very hard and nobody is getting raises. They are all feeling the brunt because they have to go to the supermarket and pay higher prices for all their food. So it seems like everybody is getting squeezed in every area.

My concern is that at this point, we are going to survive what is going on right now. I am more concerned about what is going to happen next year. It seems that the weather has had an impact. China has had an impact. I think you had mentioned that there are going to be some upcoming hearings on commodities markets and how their trading might have an impact.

I know in our business, we have lots of decisions to make every day. The decisions that we make are really based on what can we or what can't we control. If we can't control it, then it is out of our hands. But if we can control it, then we take a good hard look at it, and I think that the ethanol is a factor in the increasing food and wheat prices. So why not reconsider it?

Why not take a look maybe and my thought is we put it in a little micro environment and perfect it so maybe we can go and do the switchgrass and produce ethanol through water, and then once we have that technology perfected, we can move into those areas, because in my own business, I would never go out and bake a bread that I wasn't sure was good and bake it on a large scale and put it out in every supermarket just to have it fail. I would test it, and if I did go out and it got to the point where it went full scale and it still wasn't successful, then I would reconsider what I had done.

Chairman LIEBERMAN. Thanks, Dr. Siegel. That was both compelling and very sensible, so I appreciate that very real description of how increasing commodity prices are affecting your business and your customers and your workers.

Bruce Babcock is an agro-economist from Iowa State University and we welcome you today. Actually, it is a nice sequence here, because from your perspective, we hope you can in some ways help not only us, but Dr. Siegel understand what the causes of those food price increases for him are. Dr. Babcock.

TESTIMONY OF BRUCE A. BABCOCK, PH.D.,[1] DIRECTOR, CENTER FOR AGRICULTURAL AND RURAL DEVELOPMENT, IOWA STATE UNIVERSITY

Mr. BABCOCK. Thank you, Mr. Chairman and Senator Collins, for the opportunity to participate in today's hearing and to share my thoughts on the role that Federal policies play in affecting the amount of corn ethanol that we produce and the impact these policies have on crop and food prices.

[1] The prepared statement of Mr. Babcock with an attachment appears in the Appendix on page 156.

Many people are confused about the impact of Federal ethanol policies. Much of this confusion is caused by people assuming that because government support was instrumental in bringing forth the ethanol industry, that a withdrawal of that support would get us back to a time when prices of corn, soybeans, and wheat were less than half of today's levels.

The additional demand for corn from the ethanol industry has been a major factor causing the price of corn to more than double in the last 18 months, from $2.50 a bushel to more than $6 per bushel. This link between ethanol and corn prices gives us insight into the following question. What would happen to the price of corn if we were to eliminate the U.S. ethanol industry? But this link does not give us any insight into what would happen to the price of corn, food, and gasoline if current Federal biofuels policies were relaxed or eliminated. They are two different questions. We need to recognize that U.S. ethanol plants will not simply disappear with a change in U.S. ethanol policy. Plants will keep operating as long as it makes economic sense for them to do so.

So the three Federal policies that I want to consider in this testimony are the Renewable Fuel Standard (RFS), the blenders' tax credit, and the tariff on imported ethanol.

The RFS specifies minimum biofuels consumption levels for the U.S. Mandated use rises from 9 billion gallons in 2008 to 10.5 billion gallons in 2009. These mandates can be met from either domestically produced or imported biofuels.

The 51-cent-per-gallon blenders' tax credit is a direct subsidy given to gasoline blenders. The credit increases the willingness of blenders to buy ethanol. This increased demand increases the price of ethanol, ethanol profits and production, the demand for corn, and the price of corn. The tax credit has greatly stimulated the growth of the industry.

The import tariff is a tax on imported ethanol. It has prevented the United States from importing large quantities of Brazilian ethanol, except for a short time during 2006 when the phase-out of Methyl Teritiary Butyl Ether (MTBE) caused U.S. ethanol prices to skyrocket.

So given the level of concern about current crop prices, I first want to examine the short-term impacts of a policy change. By short-term, I mean the following: What impact would a change in Federal policy have on the supply of ethanol and the market price of corn during the period September 1 of this year to August 31 of next year? This is the period that corresponds to the marketing year for corn and soybeans, so it is a logical time period to look at.

A focus on corn is warranted because it is the crop most directly affected by U.S. biofuels policies and it is the crop that most determines the impacts on the cost of food because of its importance in determining the cost of feeding livestock. My graduate student and I have considered a number of different policy scenarios, but I want to focus on three today. These are: What would happen if we waive the mandates but keep the tax credit and the import tariffs? Or we could keep the mandates but eliminate the import tariff and the tax credits. Or we could eliminate all three. So I want to look at these in turn.

Because both the blenders' tax credit and the mandate increase the demand for ethanol, elimination of only one of them would have little impact because the other one would effectively keep the industry operating at close to capacity. Elimination of the mandate would reduce expected ethanol production by only about 4 percent. The ethanol price would drop by less than 2 percent. Ethanol imports would fall by 18 percent. And the price of corn wouldn't change.

Maintenance of the tax credit would keep demand for ethanol high and the import tariff would keep imports down. Thus, recent calls for an easing of the RFS would do almost nothing to reduce food prices or ease the financial pain of the livestock industry, at least in the short run.

The impact of eliminating both the blenders' tax credit and the import tariff but keeping the mandate would be somewhat larger because increased imports would reduce the amount of domestic ethanol that would be needed to meet the mandate. Domestic ethanol production would decline by about 11 percent and the price of corn would drop about 7 percent, so it is something. The impacts of this policy change are not any larger because the RFS keeps total demand high and the supply of imported ethanol simply is not unlimited.

A rollback of all ethanol incentives and protection would have the largest impacts. Domestic ethanol production would drop by 21 percent. The loss of demand subsidies would cause the price of ethanol to drop by 18 percent. And the price of corn would drop by 13 percent. So that is the biggest impact I could find.

We estimate that the drop in ethanol supply would increase gasoline pump prices by about four cents per gallon. That is, the expanded ethanol actually is keeping gas prices down a little bit.

The livestock industry has been hard hit by the run-up in feed costs, but high gasoline prices combined with existing ethanol plants means that corn prices in the near term will remain well above historical levels, even if the RFS, the blenders' tax credit, and the import tariff were all eliminated. This is not to say, however, that a 13 percent drop in corn prices would not help livestock producers and to a lesser extent reduce food prices. A 13 percent drop in corn prices would reduce the cost of feeding beef cattle by about 5 percent of revenue, hogs by about 7 percent of revenue, chickens by 4 percent, dairy cattle by 3 percent. This drop in production costs would eventually translate into consumer prices that would be a bit lower than they otherwise would be.

The longer-term impact of a change in Federal biofuels policy depends crucially on what the price of crude oil is going to be. If we were to eliminate all Federal biofuels policies today and future crude oil prices support wholesale gasoline prices of about $3 a gallon, then we are looking at about $4 corn, and actually, the ethanol industry would expand just from profit incentive. A return of wholesale gasoline prices to $2—we should be so lucky—would keep ethanol production at about where we are today, maybe a little higher, and corn prices would fall substantially, to $3.60 a bushel. In contrast, if we move to $4 gasoline, corn prices won't fall below $5 and the ethanol industry will expand to take advantage of the market opportunities.

The long-term results reveal two general findings. First, corn prices and gasoline prices are now inextricably linked through existing ethanol plants and the knowledge of how to efficiently convert corn to transportation fuel. This link will not be broken unless corn industry production is somehow capped. A return to inexpensive feed is simply not going to occur unless crude oil prices dramatically fall and biofuels policy is substantially changed.

Second, in the long-run, if gasoline prices rise even higher and signal that we need alternative fuel, the corn ethanol industry will expand even beyond what we project today.

I would like to now turn to the impact of policy on the prices of other crops and food. Expansion of corn use implies a cutback in planted acreage and higher prices for other crops. Soybeans are the crop most affected by competition for land. Wheat is affected by a much smaller amount. U.S. rice acreage is largely unaffected by corn prices because corn and rice are grown in different regions and it takes a fairly large incentive to move rice producers away from rice. The direct link that many people have made between U.S. biofuel subsidies and world rice prices is difficult to find.

With regards to food prices, we must remember that to a large extent, Americans do not eat agricultural commodities. Rather, we eat food manufactured from these commodities. My colleagues and I estimated that a 30 percent change in the price of corn along with corresponding changes in the prices of other crops would change home food expenditures by about 1.3 percent.

As I have discussed, altering U.S. biofuels policies will change the price of corn by much less than 30 percent, which suggests that changing Federal biofuels policies will not dramatically affect the price that Americans will pay for food. In the longer run, the price of corn and food will be determined largely by the price of crude oil.

Because the United States is a major exporter of corn, soybeans, wheat, and rice, a change in biofuels policies that does affect U.S. prices will also affect international prices. Again, corn and soybean prices are the ones most affected by a change in Federal policy. Wheat prices would be affected less. Rice prices would be largely unaffected.

Some may be skeptical of my small estimates of the effects of a change in Federal biofuels policies because of the huge run-up in wheat, rice, and feed costs over the last 18 months. But again, I have not tried to determine the impact of the elimination of the ethanol industry on commodity prices. That impact is large. Rather, I am asking what would be the impact on these commodity prices from a change in Federal biofuels policies given that we are well on our way to having 11 billion gallons of ethanol capacity in this country and that markets expect high gasoline prices for the foreseeable future. The combination of in-place capacity and high-priced gasoline implies modest impacts of a change in policy.

In conclusion, there is no doubt that the growth of the ethanol industry is an important factor in the run-up in corn and soybean prices, but this does not imply that a change in Federal biofuels policy would reverse this and make these prices go substantially lower. If we continue to see crude oil prices in excess of $100 per barrel, then there is little that the Congress or EPA can do in the

short run to significantly reduce the price of corn short of an outright ban on producing ethanol from corn. Thank you.

Chairman LIEBERMAN. Very provocative testimony, so I look forward to the question period. Thanks, Dr. Babcock.

Next is Rev. David Beckmann, President of Bread for the World, an organization that works to diminish, and, hopefully, end world hunger. We have asked Rev. Beckmann to testify today about how rapidly rising food prices have led to a global food crisis.

Thanks so much for your work and thanks for being here.

TESTIMONY OF REV. DAVID BECKMANN,[1] PRESIDENT, BREAD FOR THE WORLD

Mr. BECKMANN. Mr. Chairman, Ranking Member, and distinguished Members of the Committee, I really appreciate your focus on this issue and the chance to speak. Bread for the World is a Christian advocacy organization that focuses on hunger in our country and around the world.

We haven't traditionally done much work on biofuels policy, but like you, we are, in fact, alarmed by the dramatic increase in world hunger in just the last year, and hunger and poverty are increasing in our own country right now. So we are grappling with the biofuel issues in the same way that this Committee is and I am glad to have a chance to talk with you about how we are thinking about it.

I think I should focus first just on hunger in the world, hunger in our own country, what we think Congress can do about it, and then the role of biofuels and biofuels policy in that picture.

The increase in world hunger, as Senator Lieberman and Senator Collins both discussed, has just been alarming. The world has been making progress against poverty, but this sudden and unexpected run-up in food prices, especially commodity prices, has reversed the progress against hunger and poverty.

The commodity prices are the killer because the futures prices for the basic commodities—wheat, corn, and rice—have all shot up by something like two-thirds over the last 12 months and poor people in developing countries spend the bulk of their income on a commodity. So they don't buy corn flakes. They go and they buy corn and they grind it up, or they buy rice and they put a little vegetable and salt with it. And that food is maybe 75 percent of their income, and rice or wheat or corn is 75 percent of that. So it is the rapid run-up in commodity prices that are killing children in developing countries and causing riots in many countries.

That is caused by various factors, as others said, by crop failures in some places, by increasing incomes in Asia. That is the good news. A lot of Asians are eating better. They are eating more and they are eating a little bit of meat. That drives up commodity prices in the world. The high fuel prices are part of it. And then the shift to biofuels is part of it.

Estimates vary on how much of the cause is the shift to biofuels. So the International Food Policy Research Institute (IFPRI) says 25 to 30 percent, according to their model. The Food and Agricultural Organization says 15 to 20 percent. That seems kind of

[1] The prepared statement of Mr. Beckmann appears in the Appendix on page 162.

vaguely consistent with what Dr. Babcock found from the way he worked at it. Administration officials last Thursday, when the President announced a request for additional food aid and agricultural development assistance, estimated that the increase in corn-based industry accounts for only 2 to 3 percent in the increase in global food prices.

So the extent to which biofuels are driving up food prices is controversial, and I take Dr. Babcock's point that the increase in biofuel production is not only driven by policy. I think what is incontrovertible is that the shift to biofuels, and especially corn-based ethanol, has helped to drive up commodity prices and there is a direct and immediate link between higher commodity prices and the increase in world hunger.

In our own country, too, hunger and poverty are on the increase. We have seen increases in poverty in this country since the year 2000. So even in good economic times, poverty has slightly increased in our country. Right now, low-income people are being buffeted by a number of things. Higher food prices is one factor, not the kind of dramatic increases in food prices that poor people in developing countries are seeing, but a significant increase in food prices, especially for those foods where the commodity is a big part of the food cost.

So locally baked bread has increased more in price, as opposed to bread that is shipped from Timbuktu or someplace, because the wheat is a big part, or milk, or eggs. The price of eggs has gone up 29 percent because chickens are fed mostly corn. So we have seen some increase in food prices, especially rapid increases in those that have big portions of commodity in them. But as Dr. Babcock says, mostly what we buy in the grocery store is not commodities. We pay for the marketing, processing, and transportation.

What is also hitting poor people in this country is higher fuel prices directly. They have to fill their gas tank. They have to heat their house. Unemployment has gone up somewhat. The credit market has tightened. So we know that hunger is increasing. We know it mainly because if you go to any food pantry, any food bank in the country, they are swamped with people coming in who are in need.

Now, how to respond to that. The two main things that need to happen are, first, we need to increase food assistance to people and other kinds of assistance to people who are hungry, and then we also need to have a more dynamic, responsive agriculture.

On the food side, the Food, Conservation, and Energy Act of 2008 (farm bill) is the immediate way to deal with this, and I am pleased the conferees have agreed on a $10.4 billion increase in food assistance. But they just a few days ago killed the House's proposal for an $800 million increase in the McGovern-Dole International School Feeding Initiative. That doesn't make sense.

Within the farm bill, you can also get more food to hungry people overseas by reforming food aid, because more than half of our food aid dollars go to a handful of shipping companies. So you can reform food aid in the ways that President Bush has suggested and you get a lot more food to hungry people in a hurry.

The farm part of the farm bill is also important because the United States should be providing leadership for a dynamic, effi-

cient, responsive global agriculture. It is global agriculture that can bring down food prices again. But in fact, what the world has is a nation-by-nation, highly-managed, highly-protectionist agriculture. Many developing countries have slapped on food export limitations. But we are in no position to preach to them because our agriculture is also highly managed and protectionist.

And the President is right to insist that Congress take a turn, set a new direction in farm policy, and make it clear that the future of global agriculture is not big subsidies to wealthy landowners. So with the reforms in the farm bill, I hope the Congress gets that job done. We need a farm bill desperately. We need a better farm bill. But reform in the agricultural part of the farm bill would also be a way to address the global hunger crisis.

Finally, on the biofuels issue, I don't think that the arguments for the mandates and subsidies and the tariffs are very strong. I think it is another example of the power of special interest politics. The environmental and the economic arguments, I don't find convincing. And the increase in hunger is cause, I think, to reconsider. It is not just the next 12 months we are thinking about. The mandates would increase demand for corn-based ethanol over the coming years. So it seems to me there is cause to reconsider here.

Now, the ethanol plants and ethanol production have revivified a lot of struggling rural communities. So this isn't simple. People have changed their lives. They made investment decisions, including a lot of poor people, and you can't just turn around the next year and say, well, we are headed in a different direction. But it seems to me that nobody expected this sudden increase in food prices. Certainly nobody wants to see lots of people going hungry. So I think it is right that you are asking the question whether we could modify, slow down, or reconsider our biofuels policy.

The connection to domestic hunger is not a very strong connection as far as I can see. It is one factor. That poor family also has to pay 30 percent more for eggs than last year. But it is the connection to world hunger that is clearest, that you have a lot of babies dying in developing countries, and our switch to biofuels has been one factor in making that happen.

Chairman LIEBERMAN. Thanks very much, Rev. Beckmann. Very compelling testimony. Straight talk. We will have some questions for you.

Our final witness is Mark Rosegrant, who is Director of the Environment and Production Technology Division of the International Food Policy Research Institute. Among other things, we have asked Dr. Rosegrant to discuss the impact of global biofuels policies on food prices. Thank you for being here.

TESTIMONY OF MARK W. ROSEGRANT, PH.D.,[1] DIRECTOR, ENVIRONMENT AND PRODUCTION TECHNOLOGY DIVISION, INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

Mr. ROSEGRANT. Thank you very much, and thank you for the opportunity to be here today. As we have already heard, the recent dramatic increases in food prices are having severe consequences for poor countries and poor people around the world. Food prices

[1] The prepared statement of Mr. Rosegrant appears in the Appendix on page 166.

rose by nearly 40 percent in 2007 and another 40 percent, as we saw earlier, in early 2008. Nearly all agricultural commodities, including rice, corn (or maize as it is called internationally), wheat, meat, and soybeans have been affected.

In response to these price increases, food riots have occurred in many developing countries, including Egypt, Haiti, Indonesia, and Senegal. According to the Food and Agricultural Organization of the United Nations, 37 countries are now facing food crises of various levels of severity.

The primary triggers that have set off this rapidly-spiraling food prices are, first of all, as we were discussing here, biofuel policies, which as we have heard have led to large volumes of food crops being shifted into bioethanol and biodiesel production.

Second, bad weather in key production areas. This has been very clear in the case of wheat, where severe droughts in Australia and Ukraine resulted in very high increases in prices in the last 2 years.

Third is the higher oil prices, which have contributed to increased costs of inputs, such as fertilizer and pesticide, as well as transportation and marketing costs in the food sector.

But on top of these triggers, prices have moved sharply upward in the last few months as a result of poor international governmental policies, such as the rice export ban in Vietnam and import subsidies in India and elsewhere, which have tried to protect their own consumers but at the cost of higher prices for everyone. These, in turn, as you are going to discuss in a future meeting, have led to various types of speculative trading and storage behavior in reaction to these kinds of policies.

However, the preconditions for rapidly rising food prices stem from underlying long-term trends in food supply and demand globally during the past decade and longer. Rapid income growth and urbanization in Asia has led to increased demand for wheat, meat, milk, oils, and vegetables, and has put very strong demand pressure on soybeans, corn, and other coarse grains as livestock feed.

Something that hasn't been noticed as widely is that stronger economic growth in Sub-Saharan Africa since the late 1990s has also significantly increased demand for wheat and rice, which are basic staples in Africa.

On the supply side, long-term underlying factors include severe under-investment in agricultural research and technology development worldwide and a rural infrastructure, particularly irrigation and roads in developing countries, as well as trends towards growing scarcity of land and water globally. As a result, there has been a long-term and severe decline in productivity growth for grains such as corn, rice, wheat, and many other crops.

Let me then take a look specifically at the role of biofuel policies in the food price hikes. Rapid increase for demand in production of biofuels, and particularly bioethanol from corn and sugar cane, has had a number of effects on supply and demand systems, with shifts away from producing corn for food and also in shifts of soybeans and other crops into corn. Interestingly, even rice has been affected by these shifts because in Asia and parts of Latin America, second and third season, drier season rice, has also been shifting into corn prior to the rapid recent run-up in rice prices. These indirect de-

mand and supply-side effects on other crops have also caused bioethanol production to boost the price of rice and wheat and other crops.

To look more specifically at the impact of biofuel demands on food prices, we have done a number of analyses at IFPRI. First, we compared actual food price changes since 2000 with a counterfactual simulation with lower biofuel demand corresponding to the 1990 to 2000 rates of growth in biofuel demand.

Second, we did a couple of forward-looking assessments somewhat similar to what Dr. Babcock has presented. First was to look at an impact on food prices of a freeze in biofuel production from all crops at 2007 levels, and then what would happen if there was, in fact, a moratorium on biofuel production after 2007. We did these analyses using our impact model, which is a global modeling framework that covers supply and demand of prices and trade for agricultural commodities for 115 countries around the world as well as the global totals.

Turning first to the analysis of price evolution over the last 7 years, because again, we compared a simulation of actual demand for food crops as biofuel feedstock from 2000 to 2007, the scenario looking at the slower growth rates prior to 2007, the difference then in these two simulations shows the contribution of biofuel demand on price increases. Based on our assessment, the increased biofuel demand corresponding to the boom since 2000 accounted for about 39 percent of the increase in real corn prices and about just over 20 percent of the increase in rice prices and wheat prices during that period.

We then looked at the projected impact of a freeze, what would happen if, in fact, crop-based biofuel production were frozen at 2007 levels. On this, we projected that by 2010, corn prices would decline by about 6 percent and there would be a 14 percent decline by 2015. So this is somewhat comparable to some of the simulations that Dr. Babcock has shown. We also get then price reductions for oil crops, cassava, wheat, and sugar, about half of the results for corn prices, and the detailed results are in my written testimony.

Then what would happen if instead we actually abolished biofuel—a very severe policy of abolishing ethanol production from food crops in 2008. This would have more dramatic impacts, but again, the result would be a 20 percent drop in the price of corn, a 14 percent drop in the price of cassava, 11 percent for sugar, 8 percent for wheat, and only about a 4 percent decline in the price of rice.

So in conclusion, we see that there are various pressures on international grain markets that have contributed to rapid price increases during the past several years and biofuels have been just one contributor, but certainly a very important one, especially for corn. The slowing growth in grain supplies and rapidly growing demand for grain for all uses, including food and feed, which had been made worse by recent policy-induced distortions, however, are long-term underlying factors that cannot be easily reversed. If the world food economy is to meet the increased demand for food, feed, and fuel that is being driven by rapid economic growth and also to cope with future challenges on land use pressures, and we will see

soon the increasing pressures from climate change, we also have to deal with long-term agricultural productivity growth issues.

Higher food prices have reduced poor people's access to food, which has possible long-term and irreversible consequences for health, productivity, and well-being, particularly if higher prices lead to continued reductions in food consumption by infants and preschool children. If the current biofuel expansion continues at its rapid levels, there can be expected to be a reduction in calorie availability in developing countries relative to a slower growth rate in biofuels, and you can expect increases in malnourishment in a number of countries.

It is, therefore, important to find ways to keep biofuels from worsening the food price crisis, and a reduction in mandates or elimination of subsidies for biofuel production would contribute to somewhat lower food prices, as we have seen. But it is perhaps even more critical to focus on boosting agricultural productivity growth and improving investments in rural infrastructure in developing countries. These factors would continue to drive the future health of the agricultural sector and provide the largest role in determining food security and human well-being of the world's poorer and more vulnerable populations.

The United States can play a leading role in boosting agricultural growth by increasing investment in agricultural research and supporting reforms targeted at increased productivity on a global basis, and a major program of enhanced investment in these areas could put the United States back into a very strong moral and practical leadership role in boosting agricultural productivity growth and reducing world hunger. Thank you.

Chairman LIEBERMAN. Thanks, Dr. Rosegrant.

You were an excellent panel. I, for one, learned a lot listening to you, so I thank you. Let us do 6-minute rounds because we have a number of Senators here.

Mr. Babcock, let me begin with you. In your testimony, you outline expected corn and fuel prices that would result from a total repeal of the three ethanol incentives and you graded the impact of less comprehensive action. Sometime soon, the Senate will vote on the farm bill itself, which would, as I understand it now, scale back the blenders' tax credit from 51 cents a gallon to 45 cents a gallon. I don't know whether you have specifically looked at the impact of that modest reduction on corn and fuel prices. If you have, I would be interested. If not, based on your research, what would you predict is the likely impact? And I suppose a final question is, if you want to play the game, if you were a Senator, how would you vote on that proposed reduction?

Mr. BABCOCK. Yes. In fact, we did run that scenario because part of my Center's job is to try to keep track of farm policy and the impacts on the price of corn, soybeans, and wheat——

Chairman LIEBERMAN. Right.

Mr. BABCOCK [continuing]. So we actually did run that scenario and it had almost no impact on the price of corn. I think it went down four cents a bushel or something like that, which is consistent with the testimony here that if you took off the blenders' credit completely, instead of just six cents, it would have a modest

effect. So taking off just a little bit is going to have a very minor effect, because——

Chairman LIEBERMAN. Just go back and compare it to what the impact—you used the bushel as a standard. If this took off four cents a bushel, how about if we go back to your three ethanol incentives. How much would that reduce per bushel?

Mr. BABCOCK [continuing]. If you took everything off, we estimate about 80 cents a bushel.

Chairman LIEBERMAN. OK.

Mr. BABCOCK. So if you keep the mandate in place, a small reduction in the blenders' credit doesn't do very much.

Chairman LIEBERMAN. Right. So how would you vote if your name was called in the Senate?

Mr. BABCOCK. On that particular issue?

Chairman LIEBERMAN. Yes.

Mr. BABCOCK. It depends on what you are trying to accomplish with it.

Chairman LIEBERMAN. You have to vote aye or nay. [Laughter.]

Mr. BABCOCK. And there is no change in the import tariff?

Chairman LIEBERMAN. Well, let us assume that. I don't believe there is any change in the import tariff contemplated. There may be an amendment—well, of course, if it is a conference report, there can't be. But let us just take it alone.

Mr. BABCOCK. It would be more of a yea if they had an import tariff reduction commensurate with the change in the blenders' credit.

Chairman LIEBERMAN. Right. But alone, you would be likely to vote nay because the impact would be negligible?

Mr. BABCOCK. Right.

Chairman LIEBERMAN. OK. I squeezed that one out of you. You see how hard a job we have. [Laughter.]

I wish there was a third option—yea, nay, and it depends. [Laughter.]

Because that is true a lot of the time.

Senator MCCASKILL. Mr. Chairman, you just have to be independent. [Laughter.]

Chairman LIEBERMAN. Oh, yes. Very good, Senator McCaskill.

In your testimony, you said, Dr. Babcock, "unless we have a return to $40 or $50 a barrel crude oil, we can expect the price of corn to be well above historical levels for the foreseeable future, even if all support for corn ethanol were eliminated." So as policy makers, this puts us in an interesting position because that itself argues for the development of alternative fuels, not all based on corn, but a significant number of which will be based on commodities or raw materials which would also presumably have an impact on commodity prices. So how do we decide here?

Mr. BABCOCK. Well, with high-price gasoline, the markets are demanding and hoping for alternative fuels. We know how to produce ethanol from sugar cane and from corn——

Chairman LIEBERMAN. Right.

Mr. BABCOCK [continuing]. And so that is what we would do. So I think that if we don't want the impacts of taking land that can be used to grow food and use it to grow fuel, then we need alternatives to food-based transportation fuels. And so the investments

that the Department of Energy (DOE) is making in trying to figure out how to make waste products into transportation fuels, how to use corn and wheat residues, maybe some perennial grasses that could be grown on land that is not suitable for growing food crops, jatropha that can be grown on degraded lands, all of those alternatives are being given a huge boost by the price of gasoline, but they also could stand for some public investment in just figuring out how to do it. And so DOE's pilot programs and their investment in research centers, I think is the right path.

Chairman LIEBERMAN. I cannot resist—thank you—saying at this point that the climate change bill that Senator Warner and I, and many others, will put before the Senate in June also has an enormous flow of revenue that derives from the sale of credits but will be reinvested in technologies such as the ones you are talking about.

My time is coming to a close, but Rev. Beckmann, I was really interested that you want essentially global, not just American, but American and other programs of essentially protectionism price supports for agriculture that you would say are also a significant contributing factor in the increase in world food prices and, therefore, the increase in hunger. Do you want to talk any more about that?

Mr. BECKMANN. Sure. It just seems to me it is clear that we need an economically efficient, responsive, dynamic agriculture, and the United States, Europe, and Japan all have highly protected agricultures. The developing countries have recently put these export restrictions on food which have made the immediate problem worse.

Chairman LIEBERMAN. I assume they did it because of the price increases.

Mr. BECKMANN. Well, they are afraid, so like India, they put export restrictions on cheap rice——

Chairman LIEBERMAN. Right.

Mr. BECKMANN [continuing]. Because that is what ordinary people eat, but lots of countries have done that, and it has made the problem worse. So to have a more dynamic, responsive agriculture, it just seems that is going to bring down food prices in the medium term, and in particular, as Dr. Rosegrant said, it is agriculture in poor countries that is the hope in this crisis because there are about 100 million really very poor people who have been adversely affected.

But there are about 600 million people who are equally poor who are making their living in agriculture. So I am really delighted that the President's supplemental request for 2009 includes not just food aid, but local purchase for food aid and agricultural development through the U.S. Agency for International Development (USAID), because if we invest in the agricultural productivity of very poor people around the world, they can help to bring down food prices for the 100 million, but do it in a way that will raise their own livelihood so that you will get permanent progress against hunger.

Chairman LIEBERMAN. Thanks. I appreciate it. Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

Mr. Siegel, I had a good time visiting your retail store yesterday in York and seeing firsthand the enormous variety of breads that you produce. I want to make sure that my colleague from New Hampshire knows that you sell in New Hampshire, as well——[Laughter.]

And I am sure he is interested in your testimony, also.

It is really important that you came today because you are helping us understand the actual impact on a small business. I would like to go over with you some of the facts of your business because I am not sure that it was as clear in your quick testimony as it was when we were talking yesterday. So first, why don't you tell us how many employees you have.

Mr. SIEGEL. We have about 50 employees right now.

Senator COLLINS. So you have 50 employees. And am I correct that you use some 50,000 pounds of flour a week?

Mr. SIEGEL. Fifty-thousand pounds of flour a week, yes.

Senator COLLINS. And tell us how much you spent for that amount of flour last September.

Mr. SIEGEL. Last September, flour was $7,600 a truckload.

Senator COLLINS. Seventy-six-hundred dollars. And in February, you reached the high point so far, and what did you pay in February?

Mr. SIEGEL. We actually bought in before the peak. We paid $22,000 a truckload.

Senator COLLINS. Twenty-two thousand. So your costs in just a matter of months have gone from $7,600 for the ingredient that you use the most of to $22,000, is that correct?

Mr. SIEGEL. That is correct.

Senator COLLINS. And what has been the impact on your business in terms of pay raises for your employees or plans to expand? Has this enormous increase in your costs changed some of your plans for your business?

Mr. SIEGEL. Well, what it has done is the employees aren't getting any pay raises right at the moment. We are a small business. For me, I have always had a comfort level in knowing what it would cost to make the bread and what it costs to sell the bread. The prices increasing has basically put a big unknown factor in there because we don't know if they are going to keep increasing. Now, the prices have come down from their peak of $28,000 a truckload down to—I think today it is probably $15,000. For me, being a baker, we didn't know when it went to $22,000 and $28,000, it could have gone to $38,000 or $40,000 at some point in time. It was just out of control.

So what has happened with our business is that it is actually—we have taken kind of a different stance. We figured the only way to combat—we don't have control over the prices, so we raise the prices. We do have a lot of customers that aren't buying the bread anymore. But we are trying to grow our sales. We are just trying to increase, because we think that increased sales is the way to combat increased costs, and so we are just kind of winging it. We are trying to expand and we are going to hope that this will solve the problem.

Senator COLLINS. Thank you, and I think that testimony is very compelling because it shows the impact not just on your business,

but the 50 people who work for you whom you are not able to give pay raises to because your raw ingredients have increased, and that in turn has a ripple effect on their ability to purchase a new car, for example, or to buy more food for themselves. I think that is an important point.

I want to go to Dr. Rosegrant and talk to you a little bit about the Federal policy. As Dr. Babcock has pointed out, we are really talking about three policies on ethanol, the subsidies, the mandates, and the tariffs. And it seems to me that the combined result of those policies has been to distort the market so that food is no longer being used for food. Food instead is being used in increasing proportions for fuel.

Now, there is an alternative and that is cellulosic ethanol that doesn't use food. It uses wood chips or fiber or the corn stalks rather than the corn itself. Should our policies be revised so that instead of having this enormous subsidy, restrictive tariffs, and high mandates for corn-based ethanol, should we instead be revising those policies to encourage the development of cellulosic ethanol?

Mr. ROSEGRANT. Yes, I would support a shift in priorities along those lines. As Dr. Babcock said, even if you reduce the subsidies and remove import tariffs now, the U.S. corn-based ethanol industry would not collapse. It would still produce significant amounts, but in that case, it would be competing in a sense on a level playing field with other sources, other parts of the corn industry. So I think a movement away from those and a reinvestment of the savings, for example, the subsidies, into other types of ethanol could have long-term benefits.

So it is worth noting that even optimistic estimates would say that truly commercial cellulosic ethanol is probably 2 to 5 years away, and pessimists say 10 years, so I think with additional science-based funding that lag could be shortened and the 2- to 5-year period could come into play. So I think greater investment in those fields could have much stronger long-term payoffs.

Senator COLLINS. Thank you. Mr. Chairman, I know my time has expired. An issue that we haven't discussed is the cost to the taxpayers of these policies, as well, and whether that money could be more profitably invested elsewhere? But I have a feeling that perhaps my colleague from Oklahoma may get into that issue. [Laughter.]

Chairman LIEBERMAN. Good question.

Senator COLLINS. Thank you, Mr. Chairman.

Chairman LIEBERMAN. I have that same feeling. Thanks, Senator Collins. Senator Carper is next, to be followed by Senator Sununu.

Senator CARPER. Mr. Chairman and Senator Collins, thank you very much for holding this hearing. This is a wonderful panel, illuminating, timely, and enlightening and we are grateful to you for your testimony.

During opening statements, I mentioned, for those of my colleagues who just arrived, some news that I heard earlier this week that GM has taken, I think, an equity position in a couple of firms that are involved in producing biofuels in maybe a more cost-effective way. We are going to submit for the record some press reports about this, but I just want to share with my colleagues and those that are gathered here some of what I have learned.

The investments to produce ethanol by GM and its partners suggest there might be ways to make biofuels work without having the adverse unintended consequences with respect to the environment and with respect to food security and food prices. One of the companies that I think GM has partnered with is a company called Coskata. And Coskata apparently has developed technology to make ethanol from a wide range of products, including garbage, automobile tires that are stacking up in our States across the country, and plant waste, among others. We are told by the folks at Coskata that its design produces ethanol for less than a buck a gallon and uses less than a gallon of water for a gallon of ethanol. They are going to have their first commercial plant up and running by 2011 to make anywhere from 50 to 100 million gallons of ethanol, which is not a huge amount of ethanol in terms of our overall demand.

But the reason why I bring it up is to suggest that the free enterprise system, the marketplace, and technology can help us to address and to provide some good solutions to the challenge that we face today. I am encouraged by that and hopefully you are, too.

In terms of the use of better using and better targeting Federal dollars, the idea of actually putting Federal dollars into that kind of technology, encouraging that technology, makes a lot more sense to me and maybe it does to you, as well. My colleagues in the Delaware's delegation worked to get an $18 million Energy Department research grant about 4 years ago to go into work going on at the DuPont Experimental Station in Wilmington. That money has led to the creation of a fairly large pilot operation, a pilot plant now someplace in Iowa with a major partner that is going to hopefully get to full-scale cellulosic ethanol production in a few years, not 5 or 10 years, but hopefully sooner than that.

And also over at DuPont, they have been working on something called biobutanol, working on it with BP. There is actually a commercial operation selling the product now in Great Britain. Biobutanol has better energy density than ethanol. Biobutanol apparently travels in pipelines. Ethanol does not. Biobutanol mixes better with gasoline than traditional ethanol. So there are solutions on the way and my hope is that what we will do is be smart enough to figure out how to put our scarce Federal tax dollars into nurturing those kinds of technologies.

That was a long statement. Dr. Babcock, you and Dr. Rosegrant talked, as I recall, about the effect and shared with us some numbers about the effect on corn prices and ethanol. But you talked about eliminating the blenders' tax credit, eliminating the import tariff, eliminating the ethanol mandate, and I think you both had numbers to share with us as to the consequences of doing that. Just explain again what you said. It sounds like you are pretty close together. But just say it to us again, please. The consequences of eliminating the blenders' tax credit, the import tariff, eliminating the ethanol mandate. What are the consequences?

Mr. BABCOCK. My testimony is that if you eliminated all three of them, that it would drop the price of corn by about 80 cents a bushel. It would increase the price of gasoline by about four cents a gallon because the ethanol supply would drop. So there is a trade-off there.

If you eliminate them piecemeal, the effects are much lower. So if you just get rid of the blenders' credit, then the RFS kicks in. If you get rid of the RFS, the blenders' credit keeps things operating at capacity. So the maximum—and I am thinking short-run—of 80 cents.

Senator CARPER. All right. And Dr. Rosegrant, my recollection is you——

Senator COLLINS. Senator Carper, could I just interrupt on that point? I think it is important that you get the percentage of the increase because 80 cents sounds very small to us.

Senator CARPER. Is it 13 percent?

Mr. BABCOCK. Thirteen percent.

Senator COLLINS. I just wanted to clarify that point.

Senator CARPER. Sure. Thank you. Dr. Rosegrant.

Mr. ROSEGRANT. I think the closest analysis that we did to what Dr. Babcock said was—we didn't look explicitly at the separate items, but what would happen if you did a set of policies that would leave corn-based bioethanol production at its levels in 2007, which I think is what would happen if you implemented these. There might be a slight decline. And we ended up with an immediate decline of about 6 percent in corn prices, but a 14 percent decline by 2015 as it works through the system. So, in fact, it was quite remarkably similar, given the different kinds of models that we are using.

Senator CARPER. Your advice to us in terms of policy advice? One of my colleagues may have put this question to you before, but let me just ask it again. What should we do with respect to those three policies, the blenders' tax credit, the import tariff, and eliminating the ethanol mandate? Let me just ask everyone, from Dr. Siegel, just take it down the line, your advice to us.

Mr. SIEGEL. Actually, I can't answer that question.

Senator CARPER. Thank you very much. Dr. Babcock.

Mr. BABCOCK. It depends what you want to accomplish, but you are going to get very limited impact if you do it piecemeal.

Senator CARPER. What I want to do is to reduce our dependence on foreign oil. Frankly, I would like to be able to somehow supplement farm income to make farmers less likely to want to sell their land to developers and to maintain some of our open space and to try to find a way where biofuels can actually reduce our dependence on foreign oil and supplement farm income to some extent without just turning economics and supply and demand on its head. Rev. Beckmann.

Mr. BECKMANN. Well, I found this really instructive. I think a 13 percent decrease in the price of corn is not going to depress rural America and there are other things that you can do through farm and rural development policy that would do a lot more good for rural America. So I would get rid of all three.

Senator CARPER. All right, thank you. Dr. Rosegrant.

Mr. ROSEGRANT. I think I would be cautious about flipping all three off immediately since this kind of off and on signals is——

Senator CARPER. I agree.

Mr. ROSEGRANT. But I think a phase-down of all three would be an appropriate policy, and 15 percent isn't a lot, but it is enough to bring some starving children out of hunger in developing coun-

tries. It is not going to solve the food crisis, but it has contributed to it.

Senator CARPER. I think what one of you said, if we would ratchet down the blenders' tax credit from 51 cents and take it down to 46 cents over the next couple of years, that does not do much at all. I think everybody agrees on that.

All right. This is a very helpful hearing. Thank you very much for holding this hearing today.

Chairman LIEBERMAN. Thanks very much, Senator Carper. Senator Sununu.

OPENING STATEMENT OF SENATOR SUNUNU

Senator SUNUNU. Thank you very much, Mr. Chairman. I want to take most of my time to make a few comments, so I may not have a lot of questions. I think the panelists have already addressed many of the important points, but I think there are a couple of things we haven't touched on.

First, I want to take the time to welcome Dr. Siegel. I know he has operations in New Hampshire, and also Massachusetts. I am glad to see it is a growing small business. I am well aware of the operation because I read Senator Collins's news clips every day, and I saw a wonderful article not just about her visit, but about the great work you are doing at the bakery.

A couple of the panelists made the comment that we have to recognize that the ethanol industry won't collapse if all of these subsidies are taken away. I think that misses the point entirely because this isn't a discussion about wanting to make the ethanol industry collapse. This is a discussion about stopping bad policy that has significant economic consequences, significant environmental consequences, and significant moral implications in dealing with the food crisis around the world. It is a question of what kind of an impact do these policies have, and frankly, I think they are universally bad and we need to be a little bit more candid about their impact.

It was suggested by a couple of the panelists that it wouldn't make sense to cut back just a little bit. They suggested that we shouldn't support a small reduction in one of these programs because the impact wouldn't be that great. By that reasoning, the way to impose bad policy on America is to create 50 different programs that each imposed just a little bit of damage on our economy, just a little bit of damage on consumers. By that reasoning, Congress would never be able to justify rolling back any of those policies because rolling back any one of them would only help a little bit.

We need to be sincere and honest that these policies are damaging. They are increasing corn prices, but they are also increasing prices of all the other crops that are crowded out by the 30 million acres of corn that is being planted to support the ethanol industry. We need to be honest about the fact that there are significant implications when we set up barriers, like a tariff. We get countries around the world to do the same thing. Fewer global exchanges of goods and services, agricultural products, means higher prices for everyone in the world of all of those products, whether they are corn-related or not.

Let us talk about the impact. People say that it is really a small impact. It is only a small percent. This is a dramatic chart.[1] The bars show the percentage of corn in America that is being diverted from food to ethanol, a third this year. That is the far end, 2008. It will be 33 percent of our corn in America being diverted to ethanol. I don't think it is suddenly going to drop off in 2009 or 2010 as the mandate goes from 7 billion gallons to 10 billion gallons to 36 billion gallons in the future. That mandate is only going to create more pressure on prices, more crowding out on land. It is just hard to argue with the striking nature of that graph.

So let us talk about these impacts specifically. When you are diverting a third of the crop to ethanol, it has a real impact on prices. To produce a gallon of ethanol takes 1,700 gallons of water, 30 million acres of land going to support the corn for ethanol mandate, and all the associated labor. Those are economic inputs that could otherwise go to producing other food crops, other products, other services, in a much more efficient way that doesn't depend on a billion dollars a year in subsidy.

A lot of the justification early on was made that this was good for the environment. The most recent evaluations of the environmental impact, however, are quite different. It takes seventeen-hundred gallons of water to produce a gallon of ethanol. We have to be honest about the environmental impact in an age of scarcer water resources. Also, a recent study published in *Science* found that corn-based ethanol nearly doubles greenhouse gas emissions from the land that is cultivated over a 30-year period—a significant environmental consequence.

Finally, I want to address the moral implications in a global food crisis. We have terrible economic policies in places like Venezuela and Zimbabwe creating local shortages, and terrible military consequences of the fighting in Darfur. We need to have the most efficient, fair production and distribution of food than we have ever had before. But unfortunately, we don't because we have a 54-cent-per-gallon tax on imported ethanol. We have a 51-cent-per-gallon credit for ethanol and we have a mandate of billions and billions of gallons per year.

There is no product in the country where we mandate that consumers buy it and give the production side a tax credit. That is outrageous. And if it were any other product or service that we required consumers to buy and then gave the producers a tax credit, people would be taking to the streets because they would immediately see the injustice. But this has been papered over because of the vehicle that these subsidies move in, papered over because I think a lot of misleading information was given about the environmental consequences, and papered over because we didn't really have to suffer the price at the checkout counter until the last couple of years, until these policies have really come home to roost.

I think there hasn't been enough candid discussion about this. Frankly, there has been too much vague talk about all the different areas of production that might come in the future from non-food sources, and I think that is an area of promise, whether it is from sustainable biomass, switchgrass, non-agricultural areas, or munic-

[1] The chart referenced by Senator Sununu appears in the Appendix on page 126.

ipal waste. These are areas where product is lying, not being used, and land is not being cultivated. These areas have a lot more promise and would do a lot less damage to our economy, to our environment, and to the global food shortage.

But these corn-based ethanol subsidies have been a disaster for our economy. They have been a disaster for our environment. And today, consumers are realizing they are a disaster for their pocketbooks all over the country. Thank you, Mr. Chairman.

Chairman LIEBERMAN. Thank you, Senator Sununu. Senator Coburn.

Senator COBURN. Great question.

Senator SUNUNU. I think I was very candid at the top——

Senator COBURN. You were. I loved it.

Senator SUNUNU. I wanted to take the time to make a few points.

Senator COBURN. I am with you.

Chairman LIEBERMAN. This seems relevant with a Maine baker here that the son of the Maine baker who used to be our colleague in the Senate, Bill Cohen, had a knack, which I noticed after a year or so, that when he had a 5-minute round of questions, he would make a 4 minute and 45 second opening statement, then ask his question, and the answer would go on for 5 or 10 minutes. [Laughter.]

OPENING STATEMENT OF SENATOR COBURN

Senator COBURN. Hopefully I won't do that. I apologize for missing some of your testimonies. I would like for each of you to let me make a statement and ask if it is a correct statement.

The price of wheat right now really is not in this mix based on corn-based ethanol. Basically, we had crop failures in Ukraine, South America, and Australia that really drove up the price of wheat, is that not correct?

Mr. ROSEGRANT. That is largely correct. There has been some contribution from biofuels, but——

Senator COBURN. But the vast majority of the increase in the price of wheat has nothing to do with ethanol. Don't get confused. I am not a supporter of ethanol. But I think it is important for us to understand that oftentimes, like in Central Oklahoma, it is not corn land. You can't use the land for corn. So we are not seeing that, and wheat has moderated considerably since we saw the spikes.

It is also interesting to note that wheat reserves in this country are at the lowest level they have been in 40 years, so that is the other reason why we saw an increase.

According to my reading, at $65 a barrel oil, there is a break even on ethanol without a subsidy, is that correct or not correct? In other words, if you have $65 oil manifested to about $2.50 a gallon gasoline there is no need for a subsidy for blending ethanol. At what price of oil is there no longer a need to subsidize the blending of ethanol?

Mr. BABCOCK. Well, I will answer that. Given the existence of about 11 billion gallons of plant capacity that we are going to have, there is a direct relationship between the price of crude oil and the quantity of ethanol you want. So if you want a lot of ethanol, you

are going to have to subsidize it for a given price of oil. But there is a quantity of ethanol at $65 crude that would probably be in the neighborhood of seven to eight billion gallons.

Senator COBURN. But you are taking that completely out of any economic model. Let us say we have a real economic model and no subsidy. At what price of oil will you have people producing ethanol?

Mr. BABCOCK. It depends on the cost of corn. It is an economic model. The price of corn is linked to the price of crude. You cannot have a price of corn that is low and a price of crude that is high. If you had that kind of situation, all the ethanol plants would turn on. The price of corn would just jump right back up.

Senator COBURN. So why do we need the incentive?

Mr. BABCOCK. My testimony here is if you got rid of all the incentives, that it would not have very much impact on the total quantity of ethanol relative to what we are producing now.

Senator COBURN. So one of my economic primers is greed conquers all technologic difficulties, is not necessarily true. With oil at $122 a barrel yesterday, if we had a floor price out would we not get the same investment based on an economic model if they knew there was a fixed bottom price for the price of oil?

Mr. BABCOCK. I think, frankly, that at today's crude oil prices, you get rid of all the incentives for ethanol, we are going to grow out to the projected volume of about 14 billion gallons of plant capacity, even if you got rid of the incentives today. It just makes sense over time.

Senator COBURN. It makes economic sense.

Mr. BABCOCK. It makes economic sense.

Senator COBURN. Because money goes to the bottom line without it, and that is an important point. So in terms of policy, is it good economic policy to charge poor people taxes to incentivize ethanol production and the result of that is the cost of their food goes through the roof?

Mr. ROSEGRANT. Certainly not from an international perspective where in my work, I am worried about poor people overseas, as well, and obviously that is not a good policy for them.

Senator COBURN. Actually, what we have is a real inequity in this country today. We are going to take $13 to $15 billion worth of the taxpayers' money and incentivize something that otherwise economically would be produced with the price of oil where it is. Therefore, people with the smallest marginal disposable income are going to pay the taxes for it and will have an increased cost of living. What we have really done is we have shifted money away from the poorest to help the wealthiest. It is an absolute arcane policy that is directly opposite of what we should be about doing in this country to raise everybody up.

Are you all aware of some of the shenanigans that are going on today where somebody imports biodiesel into a Southern port, blends a gallon of real diesel with it, collects the dollar tax credit, and then sells it in Europe because they get a dollar more a gallon for the biodiesel than they do here? Are you all aware of that happening?

Mr. BABCOCK. [Nodding head.]

Senator COBURN. Would you comment on that from an economic model?

Mr. BABCOCK. Well, one way is to take away all subsidies for biofuels. That would do it. The European Union (EU) is trying to negotiate something less radical than that. I think the biodiesel producers in the United States would rather go see the EU way. But clearly, if you took away the dollar-a-gallon blenders' credit, that kind of shenanigan would go away.

Senator COBURN. Is anybody opposed to taking away the dollar-a-gallon blenders' credit for biodiesel?

Mr. ROSEGRANT. No.

Senator COBURN. Does anybody think it would have a negative impact on future production of biodiesel?

Mr. BABCOCK. I will speculate that the dollar-a-gallon credit is not enough to keep biodiesel plants running right now, given the high vegetable oil prices, and they are going to rely on that mandated use that starts kicking in in 2009.

Senator COBURN. All right. I have no further questions. Thank you.

Chairman LIEBERMAN. Excellent. Thanks very much, Senator Coburn.

Let us do another 6-minute round. Dr. Babcock, I want to come back to your research. Incidentally, I really appreciate that you and Dr. Rosegrant have presented to us some quite relevant current estimates of the impact of various policies. Of the three policies now supporting ethanol, I wanted to ask you, and maybe I missed it earlier on, what is your estimated impact of the tariff on imported ethanol alone? In other words, if we removed the tariff, what would be the percentage reduction in the price of the commodity?

Mr. BABCOCK. It would have very little impact because we would get a lot more imports into the United States, and we would more than double our imports of ethanol into the United States, but in the next year or two, the supply of ethanol that is exportable by Brazil would run out. We would take all their exportable surplus, we would bring it into the United States, and it would have some impact on the domestic production because we would essentially be subsidizing the Brazilian import of ethanol because they would qualify for the 51-cent-per-gallon blenders' credit.

Chairman LIEBERMAN. I understand.

Mr. BABCOCK. We would just be sucking the ethanol out of Brazil and it would also help meet our mandate. So it would have modest effects, though, in terms of the price of corn. It would have a bigger effect on the quantity of ethanol produced in the United States. But we would still have that 51-cent-per-gallon blenders' credit.

Chairman LIEBERMAN. So is that the big one of the three, or really it is all of them and the way they work together?

Mr. BABCOCK. It is all and how they work together. Does it really make a lot of sense to subsidize Brazilian ethanol production——

Chairman LIEBERMAN. No.

Mr. BABCOCK [continuing]. And bring it into the United States? It doesn't to me. So I look at these policies as working together, and so just taking one of them off doesn't do perhaps what you think it might.

Chairman LIEBERMAN. OK. Dr. Rosegrant—because I know you are focused on the international aspects of this—am I right that Europe, as it has tried to diversify its energy supply, has focused on biofuels?

Mr. ROSEGRANT. And particularly biodiesel, yes.

Chairman LIEBERMAN. Biodiesel, right. As we have said, Brazil has done really very well with sugar-based ethanol, and so far in the United States, we are talking about corn-based ethanol.

Can you evaluate the impact that these three different approaches to the alternative fuel challenge have had on food prices? I think you understand my question.

Mr. ROSEGRANT. Yes. Again, what we did was look at essentially the combination——

Chairman LIEBERMAN. Right.

Mr. ROSEGRANT [continuing]. Rather than pricing them out separately, and as we said, we did try to look at the historical impact from 2000 to 2007. If we look particularly at the grains, which we were looking at because they are such important staple foods, if you did a production weighted average, then the increases in biofuels since 2000 have caused about 30 percent of the increase in grain prices up through 2007. That doesn't include this policy-driven spike of the last 4 months. But it has had a bigger impact on corn, or we project it has contributed to nearly 40 percent of the increase, but only about 20 percent of the increase for rice and wheat.

Chairman LIEBERMAN. Is it constructive for there to be more international cooperation in the adoption of these commodity-based fuel alternatives? Is any of that happening now? If it did, what is the institutional way in which that could happen?

Mr. ROSEGRANT. Yes. Very little has been done on that, probably because the different countries have pursued their, in a sense, highly subsidized or protected developments of their own markets.

Chairman LIEBERMAN. Right.

Mr. ROSEGRANT. And in fact, I think one thing that should happen if, in fact, for example, there was a phase-out of some of the subsidies, would be that there should be a multilateral negotiation to have transparent markets in crop-based ethanol and diesel products that has not happened yet and try to establish, in a sense, a proper international commodity market in biofuels, but one that is not driven by the individual distortions in different countries.

Chairman LIEBERMAN. I am not an expert in this area, but is there an existing institutional framework through which that could happen?

Mr. ROSEGRANT. I don't believe there is anything other than working through existing commodity exchanges to try to develop that. But there is nothing specific for these that I am aware of, unless the others know.

Chairman LIEBERMAN. Yes. I mean, the point here obviously is that these are now, like everything else, global markets, so what we do here has an impact there. What they do there has an impact here and everywhere. So that was the question.

Rev. Beckmann, do you have a thought on this?

Mr. BECKMANN. Part of it could be the Consultative Group on International Agricultural Research, the whole network of agricul-

tural research institutes in developing countries. I don't know that they are doing anything on it, but it makes a lot of sense. There is a demand here, and it could be things that Africa is producing that now have no economic value could have some economic value. Last year, I think almost inadvertently, the foreign aid appropriations dramatically dropped USAID funding for agriculture, including contributions to the Agricultural Research Network. So investing in agricultural research is one way to handle this.

Also, it seems to me it is the broader question of if what we are trying to do here with biofuels is to deal with higher oil prices and the negative effects of reliance on fossil fuels, sharing information on how to conserve and on other kinds of alternative fuels besides agriculturally based sources of energy—I mean, we are not doing very much on wind, solar, or all the other possibilities. So I don't know of any international research. It is a really good point.

Chairman LIEBERMAN. Thank you. We will pursue that. Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

Mr. Babcock, Dr. Siegel mentioned in his testimony the role of speculation in the commodity markets, and as the Chairman has indicated, we are going to look at that issue in a subsequent hearing. When I look at the price increases in the futures markets, they seem to have reacted very sharply to the 2007 energy bill that included the increase in the renewable fuels standard. Would you agree that there was a correlation there? Is that something you have looked at?

Mr. BABCOCK. There is a very strong correlation, first of all, in the price of corn, and then because the future price of corn went up, everyone knew the price of soybeans had to follow, so then soybeans went up right afterward. I am not saying it is causal, but it happened. It is a very strong coincidence if it wasn't causal.

Senator COLLINS. It leads me to wonder if we revise the three ethanol policies whether there would be a similar reaction in the futures market where you might see a decline in commodity prices beyond what your models show. Could you comment on that issue?

Mr. BABCOCK. Yes. It is very difficult to figure that out because you really have to look at 2 or 3 years down the road. But since that time occurred, you have got to remember also that the value of the dollar was falling at that time. The price of oil was skyrocketing at that time. And everything was pushing, at the same time as the biofuels energy act was passed, the price of corn higher at that time.

But there is the possibility that if Congress made a strong statement by eliminating all support for the corn ethanol industry and said, you are on your own, there would probably be an initial reaction that would be larger than what I am estimating. But I am saying that after everything settles down and people look at the fundamental economics of corn ethanol, the plants that are being built, and the price of oil, my estimates are probably somewhere in the ballpark.

Senator COLLINS. Rev. Beckmann, do you have any comment on the impact on the futures markets in this area? I know that is not an area you have looked at directly, but——

Mr. BECKMANN. No. That is not in the Bible. [Laughter.]

Senator COLLINS. Good answer. Dr. Rosegrant.

Mr. ROSEGRANT. I would essentially agree with what you have said and what Dr. Babcock said. I think there could be a larger impact on futures markets than you would see in the fundamental spot markets, so it would wring out some of the excesses that you are seeing in market prices right now.

Senator COLLINS. I think that is an important point, given what happened when the mandate was put in place. It seemed to cause an immediate and sharp increase in prices on the futures markets. It seems that if the mandates were reduced, that you would see a similar impact in the opposite direction.

I do want to make clear that I realize that the infrastructure that has grown up in Iowa and other States to support the corn-based ethanol industry is significant, and as Rev. Beckmann pointed out, has had an impact on rural communities in a positive way. So we do have to be careful as we adjust our policy in this area because people relied on those policies. But I do think we are in a different situation today because the high price of oil makes the rationale for all these subsidies and mandates far less compelling.

Rev. Beckmann, the EPA has the authority right now to adjust the Renewable Fuel Standard mandate if there are unintended effects. That is what the standard is in the law. Do you think we as Members of Congress should ask the EPA to reevaluate the level of the mandate?

Mr. BECKMANN. That makes sense to me because when Congress made these decisions, I don't think anybody expected food prices to jump like they have. Nobody expected to see 100 million people suffering severe consequences in developing countries. It has a political dimension. There is a security dimension to this. With a lot of governments feeling very threatened and the international discussion of this issue, the people who speak for developing countries, they see that this is one factor that somebody made a decision and it has resulted in severe hardship in their cities and threatens the political stability of their countries.

So in the international discussion of this, the connection that you point out between corn-based ethanol and the sudden jump is important. So clearly, circumstances have changed, and I didn't know. If EPA has that authority, they ought to use it.

Senator COLLINS. Thank you. Mr. Chairman, I want to thank you again for holding this very important hearing. I think this is an example, perhaps the best example I have ever seen, of the law of unintended consequences. All of us want to reduce our dependence on foreign oil, which I believe poses a threat to our economic and our national security. But in doing so, in rushing to embrace the use of food for fuel, my concern is that we have exacerbated the problem of hunger worldwide, that we are causing difficulties for small businesses such as Dr. Siegel's bakery, and the policy has had also consequences for low-income families right here in our country at a time when they are struggling with the high cost of energy.

So I believe that we need to take a hard look at this policy and what appears to me to be a factor that is contributing to the high cost of food and a factor that we can control. And that is the important point to me. We can do nothing about drought in Australia. There is so much that is beyond our control. But this is a factor

that we can control and I am very grateful to the Chairman for probing this issue. I hope you will all continue to help us find the path forward in this area and I very much appreciated the testimony of each of you today. Thank you.

Chairman LIEBERMAN. Thank you, Senator Collins, again, for inspiring the hearing. I agree with what you have said just now.

The other lesson I think we learned here is that we saw the problem of dependence on foreign fossil fuel and all the impacts it has on our economy, our environment, and our security, but we, by our own action—well intended—sent a disproportionate set of subsidies to one form of alternative fuel. Presumably if we had passed a comprehensive program that sent a lot of signals to a lot of different industries—including cellulosic, biodiesel, and electric cars and all the rest, hydrogen fuel cells—I understand that they wouldn't all come online at once, but at least the impact would have been reduced, and we didn't do that. Hopefully, we will have an opportunity to do something like that soon.

But the other point that strikes me here is that none of you have said that the policies we adopted with regard to support and inventing corn-based ethanol are the only cause of food price increases. Obviously, there are others, including—this does come into your Biblical area of expertise—natural phenomena like drought. I was thinking of Joseph, who stored up the grain for 7 years, but that is a longer story.

But I am struck after your testimony this morning—I am building on the point that there is more than one cause of the global food price increase and food crisis, but that it may be that the most significant positive impact we in Congress can have in the short run on food prices is to remove these three incentives for corn-based ethanol. Your testimony has been very helpful, and I appreciate it very much.

We are going to leave the record of this hearing open for 15 days in case Members of the Committee have additional questions they would like to submit to you in writing or you have additional testimony you would want to submit for the final transcript of the hearing.

But I thank you for the work that each of you do, and the service that you have given in your testimony this morning. It was extremely helpful.

The hearing is adjourned.

[Whereupon, at 11:48 a.m., the Committee was adjourned.]

FINANCIAL SPECULATION IN COMMODITY MARKETS: ARE INSTITUTIONAL INVESTORS AND HEDGE FUNDS CONTRIBUTING TO FOOD AND ENERGY PRICE INFLATION?

TUESDAY, MAY 20, 2008

U.S. SENATE,
COMMITTEE ON HOMELAND SECURITY
AND GOVERNMENTAL AFFAIRS,
Washington, DC.

The Committee met, pursuant to notice, at 10:36 a.m., in room SD–342, Dirksen Senate Office Building, Hon. Joseph I. Lieberman, Chairman of the Committee, presiding.

Present: Senators Lieberman, Levin, Carper, Pryor, McCaskill, Collins, Voinovich, Coleman, and Coburn.

OPENING STATEMENT OF CHAIRMAN LIEBERMAN

Chairman LIEBERMAN. Good morning and welcome. This is a very important hearing this morning that really matters to a lot of people, both in our country and around the world, and I thank our witnesses.

Senator Collins and I just said to the witnesses directly that we are approaching this hearing with a great interest in learning about a very complicated matter, which is commodity markets, and examining the role of institutional investors and hedge funds in commodity markets and their effect on steadily rising oil and food prices. In other words, financial transactions that are either unknown or unfathomable by most of the country and the world, including not a small number of Members of Congress, are having a direct effect on each of us, and a lot of others, when we go out to buy food, fill our tanks with gasoline, or heat our homes with oil.

So directly speaking, we want to know, to the best of our ability, whether speculation in commodity markets—unrelated to traditional market factors, such as supply and demand, or weather occurrences—is one of the reasons, perhaps a significant reason, why food and energy prices have skyrocketed.

I will tell you that one of our colleagues said to us the other day, just in conversation as he heard about this hearing, that the executives of a major airline were in to see him about their own problems with rising fuel prices and contended that one-third of the increase in fuel prices they were paying was the result of speculation, not market factors. Now, I do not know, starting this hearing, whether that is right or wrong, but that is a very significant number.

So as everyone knows, the cost of food and energy is at a record high, creating real economic distress for millions of working families in our country and around the world. At home, rising food and gas prices put a real and immediate strain on family budgets. In some regions of the country, as most of us now know, major retailers have actually started to ration items, such as rice, in response to rising demand, low inventories, and, of course, high prices.

Overseas, the consequences are even more dire. Consumers in low-income countries spend as much as 80 percent of their income on food. Food riots in Somalia have already occurred and caused deaths. World Bank President Bob Zoellick has warned that there are 33 other nations, in his calculations, that are at risk of unrest as a result of food prices or food shortages, and one billion Asians—again, a World Bank number—are at risk of serious hunger or malnutrition.

In recent years, commodity markets have attracted increasing amounts of money from large investors, such as pension funds. That much we know and understand. This influx of institutional investors and hedge funds into relatively small markets for goods such as rice and corn has raised important questions about the ability of the markets to absorb those new investors without undermining or distorting fundamental supply and demand forces.

Speculative activity in commodity markets has grown by staggering leaps and bounds over the last several years, and the numbers here, at least to me, are staggering. From 1998 to 2008, the share of so-called long interests in commodities held by financial speculators—which is to say market positions that benefit when prices rise—has grown from one-quarter to two-thirds of the commodity market. By comparison, during the same period, the share of the market held by actual physical traders has dropped from three-quarters to just one-third. There is another number that is to me staggering. In only 5 years, from 2003 to 2008, investment in index funds tied to commodities has grown 20-fold, from $13 billion to $260 billion.

This unbridled growth raises justifiable concerns that speculative demand—divorced from market realities—is driving food and energy price inflation, and causing a lot of human suffering.

In 1936, Congress authorized limits on speculative activity that could threaten the orderly functioning of commodity markets—limits on the size of any one investor's holdings in the futures markets with respect to a specific commodity. The purpose of these limits was and is to reduce the threat of market manipulation or congestion and reduce the potential thereby for price distortions. More recently, in 1974, Congress extended the authority for speculative position limits when it created the U.S. Commodity Futures Trading Commission. Since that time, 1974, we have, of course, seen tremendous growth in new and complex financial instruments that are marketed to large and sophisticated investors in over-the-counter transactions. These instruments, often tied to returns on commodities, are sold outside the commodity exchanges and create doubts about whether the speculative limits in the law continue to work in any meaningful way. And that is a question we are going to ask and hope to answer this morning.

To examine these concerns, which we consider to be urgent concerns, we are really fortunate to have with us a distinguished panel of experts representing key actors and institutions that influence the commodity markets. And we have asked the experts to address several critical questions. First, what effect are institutional investors and hedge funds having on current food and energy prices? This is the bottom-line question that our constituents are asking. Second, do food and energy price increases constitute irrational speculative behavior, a rational response to market fundamentals, or a combination of both? Third, are rising prices creating an economic incentive for speculators to accumulate and hold stocks of food and energy commodities, therefore, obviously, aggravating supply problems? And finally, does the U.S. Commodity Futures Trading Commission, which is the primary regulator in our country of commodity futures markets, have the authority and the resources it needs today to adequately monitor and regulate commodity trading in the public interest?

I would say finally that I believe our Committee is uniquely situated to look across the Federal Government and assess the complex interaction of economic activities and regulatory policies—that is the traditional and longstanding governmental affairs responsibility that this Committee has. The issues we discuss today will help shape future debates, we hope, and also potential legislative action on the appropriate balance between free market principles and regulatory oversight in the commodity markets.

I really look forward to our witnesses' testimony and working with my colleagues to ensure that Congress takes a thoughtful, reasonable, and effective approach to the issues at hand.

Senator Collins.

OPENING STATEMENT OF SENATOR COLLINS

Senator COLLINS. Thank you, Mr. Chairman, and thank you so much for holding this very important hearing. I was talking to the witnesses prior to the hearing, and I told them, just as you did, that this is not a hearing where the Committee is going in believing that we know all the answers and are just simply seeking confirmation from the witnesses, but, rather, it is a true inquiry into a very important issue, looking at financial speculation in the commodity markets and what the impact is on the spiraling increase in food and energy prices.

Last December, I participated in the hearing held by the Permanent Subcommittee on Investigations, which Senator Levin chairs, where we looked at the causes of the increase in oil prices, and we looked specifically at speculation in addition to other factors. At that time, oil prices were then headed for $95 a barrel. We thought that was an outrage. Now most people would call it a relief.

With oil now above $125 a barrel, millions of Americans face dire hardship. A few days ago, I met with an employee of a home heating oil company from Maine. He is telling Maine customers to expect home heating oil to rise to $4.50 a gallon next winter. In the summer of 2005, just 3 years ago, before the disruptions caused by Hurricane Katrina, the average price in Maine was $2.09 a gallon.

Maine has long, cold winters, and oil is the main heating source for 80 percent of the homes in my State. Maine's housing stock and

people are older and our incomes are lower than the national average. That is a formula for a winter of hardship. My visitor told me of an elderly customer who was forced to hand over half of her Social Security check each month in order to meet the demands of her budget payment plan for oil.

I have also talked with countless families who have been forced to charge their oil bill to their credit cards—the very worst thing that they could be doing, but they have no other option. Maine families, on average, use between 800 and 1,000 gallons of oil during the heating season. For our poorest citizens, the Low Income Home Energy Assistance Program (LIHEAP) provides a little bit of relief, but because the price of oil has soared and the LIHEAP program has not kept pace, it will cover only about 100 gallons at the prices that this oil dealer is predicting for this winter.

Mainers, like other Americans, are facing record gasoline prices as well and the highest rate of food price inflation since 1990. As my constituent said, "Something is wrong."

Truly, something is wrong—deeply wrong. Senior citizens and young working families, truckers and fishermen, small shops and big factories—all face difficulties and even disaster from the price trends in food and energy. Bringing about immediate relief is very difficult, but we are beginning to take some initial steps to mitigate the distress somewhat. We have just forced the Administration, for example, to stop the bizarre practice of taking oil off the market and putting it into our already enormous Strategic Petroleum Reserve during a time of record prices. This Committee has also begun a tough review of the effects of our ethanol promotion policies on food prices. And the new Food, Conservation, and Energy Act (farm bill), due to the hard work of Senator Levin and others, has an important provision that eliminates the so-called Enron loophole in our commodity regulatory system that exempted certain electronic exchanges from the trading and reporting requirements imposed on other commodity exchanges, such as those in New York and Chicago. This will give the U.S. Commodity Futures Trading Commission a clearer view of who is trading, what they are doing, what effect they are having, and whether laws against market manipulation are being respected.

Which brings us to the subject of today's hearing. Over the past few years, a weak stock market and lower interest rates have persuaded many investors—including managers of pension funds, 401(k) plans, and endowments—to put cash into the commodity markets. A recent press release promoting a new commodities fund pointed out that commodities offer average returns that beat stocks and bonds over time, that they move independent of other investments, and that their prices go up if inflation increases.

Now, these investors are not buying and selling actual barrels of oil, bushels of corn, or herds of live cattle. Their commodity investments—estimated at upwards of $250 billion—are in futures contracts, options, swap agreements, or other financial instruments that seldom lead to taking possession of the underlying product. These financial markets provide useful services in risk hedging and price discovery for farmers and other producers, grain elevator companies, commodity brokers, and others who are involved in the production and use of physical products.

Participants in the commercial markets have long used speculators' willingness to accept risk as a way to lock in prices for crops or hedge other risks. But many of them, including the National Farmers Union and the National Feed and Grain Association, now believe that the massive trading in the non-commercial futures market has disrupted the normal flow of price information and has caused price movements that may expose them to crippling margin calls.

Federal economists—and we will hear this today—contend that index fund and institutional investors tend to follow changes in the physical market or react to news rather than directly pushing commercial prices up or down. They tell us that fundamental factors like the rising demand in developing countries, the declining dollar, weather events, the Organization of the Petroleum Exporting Countries (OPEC) production decisions, refinery capacity limits, or ethanol policies account for the dramatic developments that we have seen in markets for agricultural and energy commodities.

But many other experts believe that large flows of speculative capital into the non-commercial side of futures markets are having disruptive and destructive effects. And that view is, of course, consistent with the earlier findings of the Permanent Subcommittee on Investigations that speculative investments in excess of what normal commercial risk hedging requires creates a "virtual" demand that can have a real effect on commercial markets and prices.

Today's hearing should give us robust presentations of both views. I do not expect that this single hearing will settle the debate, but I do expect that it will show that we cannot afford to ignore the possibility that financial speculators are influencing the markets in unexpected ways.

A critical point of inquiry must be whether the market monitors and the regulators at the U.S. Commodity Futures Trading Commission (CFTC) have adequate resources and authorities for their work. I was astonished to learn from Chairman Lukken of the CFTC that since 1976, the Commission's workforce has actually declined by 12 percent while the volume of commodities contracts that it must monitor has risen by more than 8,000 percent.

The Commission, nevertheless, has imposed more than $2 billion in sanctions over the past 5 years for actual or attempted manipulation, fraud, and false reporting. Vigorous Commission enforcement requires more resources, especially given the new authority that Congress has just voted to grant the Commission.

I believe that the CFTC must also look into legal practices such as large purchases of commodity-linked financial products by institutional investors to ensure that they are not disrupting the essential market functions or exerting artificial pressure on the price of the underlying commodities.

Achieving more transparency and reducing unintended disturbances to food and energy markets is more than a matter of fair dealing and economic efficiency. It is essential to help avert disaster for millions of Americans struggling with the soaring costs of feeding their families, filling their gas tanks, and heating their homes.

Again, Mr. Chairman, thank you so much for holding this important hearing.

Chairman LIEBERMAN. Thank you, Senator Collins, for that statement and also for your characteristic support and involvement in this ongoing investigation.

As Senator Collins indicated, this is the first time this full Committee, certainly in the midst of this run-up of commodity prices, has conducted an investigation. But the Permanent Subcommittee on Investigations, which is a historic Subcommittee, not just because of Senator Levin's age but because it is historic—I could not resist—has done some great work here. I want to directly ask Senator Levin if he would like to make an opening statement based on all the work that he has done in this area.

OPENING STATEMENT OF SENATOR LEVIN

Senator LEVIN. Well, thank you so much, Mr. Chairman and Senator Collins, for holding these hearings. As you both mentioned, our Permanent Subcommittee on Investigations has had three hearings on this subject. Four reports have been issued. We have looked at the way in which one hedge fund, Amaranth Advisors, surely a speculator, distorted the market in natural gas. We had a joint hearing on December 11, 2007, with Senator Dorgan's subcommittee, the Subcommittee on Energy, of the Committee on Energy and Natural Resources, on this subject as well, and it is very important what you are doing here. I want to just commend the full Committee for taking on this subject.

We have closed one loophole where we hope to stop some of the excessive speculation that is taking place on the electronic exchange by closing the Enron loophole, but there are other loopholes that need to be addressed, one of which we will now call the London loophole.

Just one quote here, which summarizes what my conclusion is, and that is the oil analyst for Oppenheimer and Company, Fadel Gheit, who says the oil market is a "farce" and "the speculators have seized control, and it is basically a free-for-all, a global gambling hall, and it won't shut down unless and until responsible governments step in."

One of the issues that I know the Committee is interested in is whether or not our regulator here, and regulators, are stepping in the way we expect when we passed the law which gave them the responsibility of prohibiting excessive speculation. But I very much appreciate your referring to our efforts in both of your statements, and I thank you for the opportunity of saying just a few words.

Chairman LIEBERMAN. Thank you, Senator Levin. Thanks for your substantial contribution, and I am really glad that you are here this morning. Your closing words are a perfect lead-in to our first witness, who is Jeffrey Harris, Chief Economist at the U.S. Commodity Futures Trading Commission. The Economic Division of the CFTC has conducted a fair amount of research in an effort to understand the role of financial speculators in commodity markets, and we look forward to hearing about that and whatever else Mr. Harris would like to tell the Committee. Thank you for being here.

TESTIMONY OF JEFFREY H. HARRIS,[1] CHIEF ECONOMIST, U.S. COMMODITY FUTURES TRADING COMMISSION

Mr. HARRIS. Thank you, Mr. Chairman and Members of the Committee. I am Jeffrey Harris, the Chief Economist of the U.S. Commodity Futures Trading Commission, and I appreciate the opportunity to discuss the CFTC's role with respect to the futures markets and our view of current trends in these markets.

These are extraordinary times. Many commodity markets have hit unprecedented levels. In the last 3 months, the agricultural staples of wheat, corn, soybeans, rice, and oats have hit all-time highs. We are also witnessing record prices in crude oil, gasoline, and other energy products.

Adding to these trends, the emergence of the subprime crisis last summer and the weak returns in debt and equity markets have led investors increasingly to seek portfolio exposure in commodities as an asset class.

Futures markets in the United States have served vital functions for risk management and price discovery for more than 140 years. These markets allow farmers and other commercial producers and manufacturers to manage risk. Futures markets also serve the valuable function of price discovery, bringing diverse participants to the market in order to determine market prices, the basic future contract entered into by buyers and sellers for delivery of the underlying asset in a later month. The writer or seller of the contract agrees to sell a pre-specified asset at a pre-specified price for delivery during a future month. The buyer is obligated to purchase the asset under the terms of that contract.

When the contract is written, each party puts down a margin deposit with the clearinghouse to ensure that neither party reneges on the obligation written in the contract. These deposits usually represent 5 to 8 percent of the value of the underlying contract. In our futures markets, profits and losses are settled each day, and sometimes twice a day. The margin deposit is used as a performance bond to ensure that losses can be collected on the day that they occur.

Notably, margin in the futures market refers to this performance bond and is not really analogous to the buying on margin that occurs in the stock market where purchases are made with borrowed money. In the futures markets, these contracts are standardized, a feature that enhances liquidity and ensures that market participants can return to the market to offset their existing positions when the market or business conditions change.

The supply of futures contracts is not necessarily limited, but for every buyer there must be a seller on the other end to meet or enter into that contract. When buyers come to the futures markets, new contracts can be written at current market prices without the effect of directly bidding up existing contract prices. The number of contracts outstanding is known as "open interest," which reflects the number of contracts being written in the marketplace. In both agricultural and energy markets, we are witnessing record levels of open interest that reflect unprecedented levels of selling interest in these commodities largely from commercial participants.

[1] The prepared statement of Mr. Harris appears in the Appendix on page 170.

We are continually doing new analysis of our detailed market data, applying new research methods, and building bridges to outside researchers and government entities, all to increase our view of the futures markets. And, separately, our Division of Enforcement investigates any specific instances of potential manipulative behavior on a case-by-case basis.

In line with these efforts, the agency convened an agricultural forum a few weeks ago in which we brought together a diverse group of market participants for a full airing of views and opinions on the driving forces in these markets. The agency allowed a 2-week period for comment after the forum, and currently, the Commissioners and staff are reviewing the comments we received, and the Commission plans to announce several initiatives in the very near future in this space.

The CFTC also recently announced the creation of an Energy Markets Advisory Committee and named public members of the Committee. Our first meeting of that group is scheduled for June 10 to look at issues related to energy markets and the CFTC's role in these markets under the Commodity Exchange Act.

Clearly, the commodity futures markets are experiencing robust growth across commodities, particularly with the influx of institutional investors. The CFTC produces public reports detailing commercial and non-commercial trading on a weekly basis in our markets. Within the Commission, however, we analyze more detailed data and more detailed categories of positions of traders at the daily level. For instance, we can break down commercial traders by dealer, manufacturer, or producer categories. The non-commercial category can include floor participants, hedge funds, for example. We then use this daily data to analyze the impact of institutions or funds in our markets.

There are two basic types of activity that people refer to as "funds." Each is identified to some degree of accuracy in our large trader reporting system. The first type of fund represents speculative monies that enter the futures markets through various forms of managed money, like hedge funds or commodity pools. Managed money funds can either be long or short, depending on their speculative beliefs about future prices.

The second type, referred to as "index funds" or "commodity index traders," has become more important in recent years. These funds, commonly pension funds or the university endowments that we speak of, seek commodities' exposure as an asset class, like stocks, bonds, or real estate, and aggregated index fund positions are relatively large, predominantly long, and passively positioned—that is, they simply buy exposure to the commodities in the futures markets, maintain their exposure through pre-specified rolling strategies before the futures enter the delivery month. It is the equivalent to a buy and hold strategy in the stock market.

In response to the growing activity in commodity index traders, the Commission has increased transparency in 12 agricultural markets by publishing weekly data on these positions held by index traders since January 2007. Some observers suggest that higher crude oil prices and commodity futures prices are being driven by speculators in the futures markets and have suggested steps to reduce or limit their actions in our marketplace. The CFTC has been

actively engaged with industry participants during this time of extraordinary price increases. In addition, we have utilized our comprehensive data to rigorously analyze the role of hedges and speculators in energy and agricultural markets.

All of the data that we have analyzed and the work we have done indicates that little economic evidence exists to demonstrate that futures prices are being systematically driven by the speculators in agriculture and energy markets. Generally, a few facts speak to this. Prices overall have risen sharply for commodities that neither have developed futures markets, like durum wheat, steel, and iron ore, or markets where no institutional fund investments exist, like the Minneapolis wheat contract and Chicago rice.

Markets where index trading is the greatest as a percentage of the total open interest—the live cattle and hog futures markets—have actually suffered from declining prices during the past year. The level of speculation in commodity and crude oil markets has remained relatively constant in percentage terms as prices have risen.

Our studies of agricultural and crude oil markets have found that speculators do tend to follow prices rather than set prices in our marketplace. Speculators such as managed money traders are both buyers and sellers in these markets, and data shows that there is almost the same number of bullish funds as there are bearish funds in our markets. For example, commercial and non-commercial open interest in crude oil has grown during the recent 22 months, but generally remains balanced between long and short positions among these trader groups.

Simply put, economic data shows that overall commodity prices and levels, including agricultural commodity and energy futures prices, are being driven by powerful economic fundamental forces and the laws of supply and demand. Fundamental economic forces may be the increased demand from engagements, the decreased supply due to weather or geopolitical events, and the weakened dollar. Together, these fundamental factors have formed the perfect storm that is causing significant upward price pressure on futures across the board.

Given the widespread impact of higher futures prices, the CFTC will continue to collect and analyze data closely. The agency prides itself on our robust surveillance and enforcement programs complemented by rigorous economic analysis that we use to oversee the U.S. futures and options markets. As you know, there is an amendment in the Commodity Exchange Act now that is part of the farm bill conference report that largely reflects the Commission's recommendations on the need for some additional tools to oversee exempt commercial markets. These provisions represent years of hard work and bipartisan effort to find the right balance of enhanced market oversight and transparency, while promoting market innovation and competition.

The Commission strongly supports this legislation, and it would give us additional necessary oversight into these markets, particularly in exempt energy trading. Not surprisingly, additional authorities included in the farm bill will mean the need for additional funding for the agency above the current funding request of $130 million for fiscal year 2009. The current staff estimates indicate

that it may require roughly $6 million in additional funding to hire 30 additional staff to carry out our new authorities. The legislation that is part of the farm bill and commensurate increase in funding would ensure the agency has the tools necessary to oversee these $5-trillion-a-day markets.

As a Commission, we are devoting, and will continue to devote, an extraordinary amount of resources to ensure that futures markets are responding to fundamentals and serving the role of hedging and price discovery.

Thank you for the opportunity to testify today, and I look forward to your questions.

Chairman LIEBERMAN. Thanks, Mr. Harris, for that opening statement. I know we will have a lot of questions for you.

Our second witness is Michael Masters, who is Managing Member and Portfolio Manager at Masters Capital Management. He is both a hedge fund founder and manager and has researched the effect of speculators—particularly those operating in over-the-counter markets outside the scope of the CFTC's jurisdiction—on commodity markets.

Mr. Masters, thanks for being here. We look forward to your testimony now.

TESTIMONY OF MICHAEL W. MASTERS,[1] MANAGING MEMBER AND PORTFOLIO MANAGER, MASTERS CAPITAL MANAGEMENT, LLC

Mr. MASTERS. Thank you, Mr. Chairman. Good morning, and thank you, Mr. Chairman and Members of the Committee, for the invitation to speak to you today.

You have asked a question: Are institutional investors contributing to food and energy price inflation? And my unequivocal answer is yes. Clearly, there are many factors that contribute to price determination in the commodities markets. However, I am here to expose what I believe is one of if not the primary factor in commodity prices. Commodity prices have increased more in the aggregate over the last 5 years than at any other time in U.S. history. Today, unlike previous episodes, supply is ample. There are no lines at the gas pump, and there is plenty of food on the shelves. If supply is adequate, how does one explain a continuing increase in demand when many commodity prices have tripled in the last 5 years?

What we are experiencing is a demand shock, coming from a new category of participant in the commodities futures markets—institutional investors. Specifically, these investors include corporate and government pension funds, university endowments, and even sovereign wealth funds. Collectively, these investors now account, on average, for a larger share of outstanding commodities futures contracts than any other market participant.

These parties, who I call "index speculators," allocate money to the 25 key commodities futures that make up the two most popular indices: the Standard & Poor's Goldman Sachs Commodity Index, and the Dow Jones AIG Commodity Index.

[1] The prepared statement of Mr. Masters appears in the Appendix on page 191.

The first chart shows assets allocated to the commodity index trading strategies have risen from $13 billion to $260 billion in the last 5 years, and prices have risen by an average of 183 percent over that same time frame.[1]

According to the CFTC and spot market participants, commodity futures are the benchmark for prices of actual physical commodities. So when index speculators drive futures prices higher, the effects are felt immediately in spot prices and the real economy.

Looking at oil prices, the explanation given most often for rising oil prices is the increased demand for oil from China. According to the Department of Energy, annual Chinese demand for petroleum has increased over the last 5 years by 920 million barrels. However, over the same 5-year period, index speculators' demand for petroleum futures has increased by 848 million barrels. The increase in demand from index speculators is almost equal to the increase in demand from China.

Let me say that again. The increase in demand from index speculators is almost equal to the increase in demand from China.

In fact, index speculators have now stockpiled, via the futures market, the equivalent of 1.1 billion barrels of petroleum, effectively adding 8 times as much oil to their own stockpile as the United States has added to the Strategic Petroleum Reserve over the last 5 years.

Chairman LIEBERMAN. Why don't you repeat that one, too.

Mr. MASTERS. In fact, index speculators have now stockpiled, via the futures market, the equivalent of 1.1 billion barrels of petroleum, effectively adding 8 times as much oil to their own stockpile as the United States has added to the Strategic Petroleum Reserve over the last 5 years.

Chairman LIEBERMAN. Forgive me for interrupting, but just for clarity, is that real oil that they are stockpiling or contracts?

Mr. MASTERS. These are futures contracts, which they roll over and over, so the effect is the same. It is via the futures markets. It has the same effect as a physical consumer.

Chairman LIEBERMAN. OK. Go ahead.

Mr. MASTERS. Looking at food prices, when asked to explain the dramatic increase in food prices, many economists focus on the partial diversion of the U.S. corn crop to ethanol production. But institutional investors have purchased over 2 billion bushels of corn futures in the last 5 years. Right now index speculators have stockpiled enough corn futures to potentially fuel the entire United States ethanol industry at full capacity for a year.

Turning to wheat, in 2007 Americans consumed 2.2 bushels of wheat per person. At 1.3 billion bushels, the current wheat futures stockpile of index speculators is enough to supply every American citizen with all the wheat products they can eat for the next 2 years.

Demand for futures contracts can only come from three sources: Physical commodity consumers, index speculators, and traditional speculators. Five years ago, index speculators were a tiny fraction of the commodity futures markets. Today, in many commodities futures markets, they are the single largest force. The huge growth

[1] The chart referenced appears in the Appendix on page 137.

in their demand has gone virtually undetected by classically trained economists who almost never analyze demand in the futures markets. Index speculator demand arises purely from portfolio allocation decisions. When an institutional investor decides to allocate 2 percent of their assets to commodity futures, for example, they come to the market with a set amount of money. They are not concerned with the price per unit. They will buy as many futures contracts as they need at whatever price is necessary until all their money has been "put to work." Their insensitivity to price multiplies their impact on commodity markets. Furthermore, commodities futures markets are much smaller than the capital markets, so multi-billion-dollar allocations to commodities markets will have a far greater relative impact on prices.

In 2004, the total value of futures contracts outstanding for all 25 index commodities amounted to only about $180 billion. Compare that with worldwide equity markets which totaled $44 trillion at the time. That year, index speculators poured $25 billion into these markets, an incredible amount equivalent to 14 percent of the total market. The second chart shows this dynamic at work.[1] As money pours into the markets, two things happen concurrently: The markets expand and prices rise.

One particularly troubling aspect of index speculator demand is that it actually increases the more prices increase. This explains the accelerating rate at which commodity futures prices are increasing. Rising prices attract more index speculators who want to profit from price increases.

We calculate that index speculators flooded the markets with $55 billion in just the first 52 trading days of this year. That is an inflow of more than $1 billion a day. We believe that this is a primary factor behind the recent spike in food and energy prices.

There is a crucial distinction between traditional speculators and index speculators: Traditional speculators provide liquidity by buying and selling futures. Index speculators buy futures and then roll their positions by buying calendar spreads. They never sell. Therefore, they consume liquidity and provide zero benefit to the futures markets.

The CFTC has granted Wall Street banks an exemption from speculative position limits when these banks hedge over-the-counter swaps transactions. This has effectively opened a loophole for unlimited speculation. When index speculators enter into commodity index swaps, which 85 to 90 percent of them do, they face no speculative position limits. In fact, the really shocking thing about the swaps loophole is that speculators of all stripes can use it to access the futures markets. So if a hedge fund wants a $500 million position in wheat, which is way beyond position limits, they can just enter into a swap with a Wall Street bank, and then the bank buys as a surrogate $500 million worth of wheat futures.

I would like to conclude my testimony today by outlining several steps that can be taken to immediately reduce index speculation.

One, Congress has closely regulated pension funds, recognizing that they serve a public purpose. Congress should modify the Employee Retirement Income Security Act (ERISA) regulations to pro-

[1] The chart referenced appears in the Appendix on page 138.

hibit commodity index replication strategies as unsuitable pension investments because of the damage that they do to commodities futures markets and to American consumers as a whole.

Two, Congress should act immediately to close the swaps loophole. Speculative position limits must "look through" the swaps transaction to the ultimate counterparty and hold that counterparty to the speculative position limits. This would curtail index speculation, and it would force all speculators to face position limits.

In conclusion, is it necessary for the U.S. economy to suffer through yet another financial crisis created by new investment techniques, the consequences of which have once again been unforeseen by their Wall Street proponents?

This concludes my testimony.

Chairman LIEBERMAN. Well, that certainly frames the issue. Thank you, Mr. Masters, and we will come back to several of the questions you raised.

Our next witness is Thomas Erickson, Chairman of the Commodity Markets Council, a trade association composed of the futures exchanges and members of the commodity futures trading industry. Mr. Erickson is a former Commissioner of the CFTC and, among other things this morning, I know he will share with us the insight of someone who has worked on both the regulatory and business sides of commodity trading.

Thanks for being here.

TESTIMONY OF THOMAS J. ERICKSON,[1] CHAIRMAN, COMMODITY MARKETS COUNCIL

Mr. ERICKSON. My pleasure, Mr. Chairman. I am Tom Erickson, and I am Chairman of the Commodity Markets Council (CMC). It is a pleasure to be here. I also serve as Vice President of Government and Industry Affairs for Bunge Limited, which is a global agribusiness and food company.

Mr. Chairman and Ranking Member Collins, Members of the Committee, the issues you plan to address today and are addressing are very important to markets and their users, and I thank you for convening this hearing. The CMC is privileged to participate.

The Commodity Markets Council is a trade association that represents commodity futures exchanges and their industry counterparts, and the activities reflect the complete spectrum of the commercial marketplace involved in commodity futures.

First, I would like to discuss the role of institutional investors and hedge funds in commodity markets. The CMC considers the investment activity of institutional investors and index funds as appropriate financial hedges. However, we recognize that these investments tend to be passive in nature and are not responsive to price levels or supply and demand fundamentals. Given the many concerns among commercial market participants about convergence of futures with cash, we believe the CFTC's recent decision to go slow in expanding current exemptions for this new class of investors will serve the marketplace well. It will also serve the CFTC and the market users, like Bunge, to give us more time to evaluate

[1] The prepared statement of Mr. Erickson appears in the Appendix on page 208.

the impact this passively invested money may have on commodity markets.

It is important to note that this type of investment is new and different, as has been mentioned, but it is not necessarily bad. Equally important is the distinction between passive investment and price-responsive investment. Typically, index funds are institutional investors who engage in passive investments. Passive investors typically buy a long position and hold it to a predetermined time. On the other hand, hedge funds tend to be more responsive to market signals, trading in a manner that is more similar to the traditional speculative participant that we have seen historically. As such, hedge funds are appropriately subject to speculative position limits of the markets and of the Commission.

In the last decade, futures markets and physical commodities have grown immensely because of the growing relevance of their products. Increased liquidity in well-functioning markets aids price discovery and generally enhances market efficiency.

We recognize that passive investment in the commodity markets may have some price-lifting impact, but market fundamentals generally support the current price levels seen in the futures markets. Today's markets are reflecting global economics and trends. Speculative activity in futures markets may influence day-to-day prices, but it is ultimately relatively powerless in the face of these larger, fundamental forces that we are seeing.

To address the concerns surrounding this new investor in commodity markets—that is, the passive investor—the Commodity Markets Council recommends: First, that exchanges and the CFTC continue to monitor index fund participation closely and be prepared, if necessary, to examine the structure of the hedge exemptions that have been currently granted.

Second, the CMC would support legislation and regulations that allow the exchanges to continue innovating to provide new products to manage risks for those of us on the commercial side.

And, finally, the Council recommends that the CFTC initiate a study of the trend toward "alpha" trading by index and hedge funds. It is a relatively new phenomenon where you have got index funds actually trading in a way to outperform the market.

Next, I would like to briefly discuss margin requirements in the energy markets. With crude oil prices moving higher and higher, the Council shares the concerns of many lawmakers. We are confident in the ability of the CFTC's professional staff to monitor and evaluate trading in the regulated energy markets, as well as their conclusions about the impact of speculation on prices in the energy futures markets, and we will continue to look forward to working with them as we all face these unprecedented times.

The Council is concerned about a provision in the Consumer-First Energy Act. While the organization is generally supportive of the legislation, there is a provision that would require the CFTC to set "a substantial increase" in margin levels for crude oil. And while it appears the intent of the provision is to have some ability to lower prices, we believe that increased margin requirements unrelated to market signals could force many market participants off-exchange and perhaps into some of these less transparent markets that we have talked about and that the Enron loophole fix will at

least give us some assistance. But that is one concern that we do have going forward.

Finally, the Commodity Markets Council believes that it is important to discuss the unprecedented challenges facing the grain markets. The CMC recently brought together exchanges and exchange users to discuss futures market performance in the grain industry. The overriding concern expressed by participants and producer groups was the financial impact of high commodity prices and price volatility. Generally, participants did not blame institutional investors or hedge funds for pushing prices higher. Instead, they did identify five macroeconomic trends which I think we are all pretty familiar with, but I will list five of them here that came out of our own task force: One, strong economic growth in developing countries, such as China and India; two, increased demand for commodities used for biofuel production; three, reduced yields in some of the major global producing areas due to weather issues.

Fourth is a relatively new development, and that is export controls. In the face of 60-year-low supplies of wheat and 35-year lows of soybean stocks, we are seeing governments respond with export controls limiting supply to the global market and limiting the ability of the industry to really move efficiently stocks to areas of scarcity.

And, fifth, the weakening U.S. dollar.

Regarding technical futures market performance, participants in the Council's task force cited consistent price convergence as the primary area of concern, yet most of those interviewed by the task force urged exchanges at this point not to make dramatic changes to contracts until the markets can really adjust to this new operating environment of higher prices and increased volatility.

For the short term, the consensus seemed to be changes were needed in the grain contracts that would increase storage rates to promote convergence during delivery of corn, soybeans, and wheat, and also giving the exchanges the authority to clear over-the-counter grain swaps as a new tool for risk management.

In conclusion, these are very complicated times for the markets and market participants. The Commodity Markets Council believes that markets generally are the most efficient filters of information, and given time to respond, markets will and should adapt.

Mr. Chairman, we compliment you and Senator Collins, for your efforts in this area, and we look forward to working with you. Thank you.

Chairman LIEBERMAN. Thanks, Mr. Erickson.

Our fourth witness, Benn Steil, is a Senior Fellow and the Director of International Economics at the Council on Foreign Relations. In addition to being an expert on the behavior of institutional investors, Dr. Steil is one of our Nation's authorities on monetary policy. I once heard Bill Cosby say that the worst introduction that you could give him is to say he was the funniest man on the Earth, so I am worried that I am building you up too much. But the truth is you have had a very distinguished career, and we are particularly interested in hearing your thoughts not only on what we have discussed so far, but on the extent to which the weakness of the dollar today may be affecting commodity prices and obviously the

relevant next step, which would be how would a stronger dollar affect commodity prices.

In any case, thank you for being here, and we look forward to your testimony.

TESTIMONY OF BENN STEIL, PH.D.,[1] SENIOR FELLOW AND DIRECTOR OF INTERNATIONAL ECONOMICS, COUNCIL ON FOREIGN RELATIONS

Mr. STEIL. Thank you, Chairman Lieberman, Ranking Member Collins, and Members of the Committee, for the opportunity to present to you this morning my views on the causes of rising financial speculation in commodities markets.

The sharp recent rises in global commodities prices, particularly in the energy and agricultural sectors, are undoubtedly causing hardship for many Americans and are indeed threatening the health of millions in developing countries. There is also no doubt that these price rises have been accompanied by a corresponding rise in interest from institutional investors in commodities as an asset class. The value of commodity index investments, for example, has grown by about one-third since the beginning of the year, to more than $250 billion.

Certainly, much of this inflow is speculative in the sense that it is anticipating future supply constraints and robust demand. Both have been very much in evidence in recent years, and to the extent that speculation is driven by such factors, it is playing a proper and indeed important role; that is, signaling the need to expand investment in production capacity, and providing liquidity to hedgers.

If this inflow is manipulative, on the other hand, it should be a matter of immediate regulatory concern. But there is very little evidence to date that it is. Low and declining levels of inventory for major food crops, for example, indicate no potentially manipulative hoarding going on in that sector.

Now, so-called fundamental factors, related to supply of and demand for specific commodities, can certainly account for a goodly portion of the run-up in prices in recent years.

The supply of global farm acreage and crop output is shrinking relative to a global population that is rising both in size and wealth.

Rapidly growing demand from China is certainly part of the equation. Demand from China accounts for about 30 percent of the increase in crude oil demand over the past decade. A 6-percent rise in base metals demand last year was driven by a 32-percent increase in demand from China.

The tripling in oil prices since 2004 has spurred the production of biofuels, like corn-based ethanol, which has in turn contributed to record prices in corn and rival grains. These in turn have made products whose production relies on grain-based feed, such as milk and eggs, more expensive. This year, about 30 percent of U.S. corn production will go into ethanol rather than into world food and feed markets.

While all of these factors are acting to constrain supply or boost demand, governments around the world exacerbate these effects

[1] The prepared statement of Mr. Steil appears in the Appendix on page 212.

through public policy. Governments subsidize consumption of agricultural staples and energy products, for example, with the effect that demand does not moderate as it should. Governments have also been imposing agricultural export tariffs and bans, with the unintended consequence that farmers are motivated to reduce supply.

Yet all these fundamental factors, as important as they are, cannot explain the magnitude of price rises in recent years. The stories about global population growth and the rise of China, for example, are by now very old.

Many have recognized this and have, therefore, asserted that we are experiencing a commodities bubble. This conclusion, however, presumes that the U.S. dollar, which the world uses to price and trade commodities, is a fixed unit of measurement, like an inch or an ounce. Yet it is not, and, worryingly, it has become less so in recent years. Whereas the prices of oil and wheat measured in dollars have soared over the course of this decade, they have, on the other hand, been remarkably stable when measured in terms of gold—gold having been the foundation of the world's monetary system until 1971.

It is, therefore, reasonable to conclude not that we are a experiencing a commodities bubble but, rather, the end of what might usefully be called a "currency bubble."

The early 1980s witnessed the painful restoration of the global credibility of the dollar under the tight money policy of the Paul Volcker-led Federal Reserve. We reaped the benefits of this achievement in the subsequent decade. The period of the 1990s through the early part of this decade was a golden age for the U.S. dollar. Investors around the world bought up dollar-denominated assets, and central banks sold off their gold reserves, believing they were no longer necessary or desirable, allowing our country to enjoy the fruits of a sustained period of low interest rates and low inflation. But the Federal Reserve has pushed rates too low and held them low for too long, and has since last autumn been exceptionally aggressive in driving them well below the rate of inflation. The Federal Funds Rate now stands at 2 percent, while consumer price inflation is near 4 percent and wholesale price inflation near 7 percent. More worrying, the latest survey from Reuters and the University of Michigan found that consumers' 1-year inflation expectations have risen to 5.2 percent, up from 4.8 percent in April and 4.3 percent in March.

The dollar's value against the euro being tightly linked to the interest rate differential between the currencies, investors have shifted funds dramatically from low-yielding dollars to higher-yielding euros in recent years. Much more worrying, however, the correlation between dollar depreciation and commodities prices has become dramatically more pronounced since 2007.

Institutional investors around the world—prominent among them, large U.S. public pension schemes, such as the California Public Employees' Retirement System (CalPERS)—have come to view commodities as part of a rapidly growing asset class devoted to inflation protection.

Longer term, governments themselves may actually fuel the upward commodities price trend by diversifying central bank reserves

into commodities as a way to avoid precipitating further depreciation of their existing huge stocks of dollar-denominated assets—in particular, U.S. Treasurys.

What happens to commodities investment, and therefore commodities prices, going forward is, therefore, heavily dependent on the path of inflation and inflation expectations, and this path is itself critically dependent on developments in U.S. monetary policy.

What policy measures, then, could help to relieve the damaging upward pressure on global commodities prices? I would identify two broad areas that merit attention.

First, we and other nations need to revisit honestly and objectively the range of subsidies and taxes we apply to encourage or discourage consumption and investment in the agricultural and energy sectors. The mix is far from optimal and is becoming more damaging over time.

Second, more of the burden of dealing with the fallout from the mortgage and interbank credit crisis should be moved on balance sheet. That is, Congress should look to targeted, explicitly funded, and market-oriented interventions to help revive the credit markets, which in turn will help revive the broader economy. To date, far too much of the burden has been borne by monetary policy, which is threatening to cause higher inflation, and leading individuals and institutions around the world to question whether the dollar will remain a credible long-term store of value. One highly undesirable result of this is soaring global commodity prices.

Thank you, Mr. Chairman. Thank you, Senator Collins.

Chairman LIEBERMAN. Very interesting. Thank you, Dr. Steil.

Our last witness is Tom Buis, who is President of the National Farmers Union. He is in a very good position, of course, to share the perspective of the family farming community, and we thank you, Mr. Buis, for being here.

TESTIMONY OF TOM BUIS,[1] PRESIDENT, NATIONAL FARMERS UNION

Mr. BUIS. Thank you, Mr. Chairman and Members of the Committee. I commend you for holding this hearing. This is probably the most friendly hearing I have been to in the last few months. It seems like everyone wants to blame farmers for everything, and we are finally getting the message across that there are a lot of other factors. It is not the price of those raw commodities, and I did not bring it with me today, Mr. Chairman, but we have a chart that we publish on our Website, the farmer's share of the consumer dollar. And it averages less than 20 percent, even at today's prices. And for all those people that want to blame everything on corn ethanol, I may just chime in. I got stuck in traffic for 2½ hours this morning, so I might as well blame it on that.

But there are a lot of factors at play. If you look at the skyrocketing energy prices and the impact that has on obviously food production, it is tremendous. You start at the farm. It takes a lot of energy to produce a crop. Farmers and ranchers are bearing the brunt of those higher energy prices, as our input costs have tripled over the past 2 years in many components, including petroleum-

[1] The prepared statement of Mr. Buis appears in the Appendix on page 219.

based fertilizers and pesticides. And there are a lot of hands that handle this product from the farmer before it gets to the consumer. And everyone has got their hand in the till, so to speak. Even the factors we are talking about today, the speculative limits and the speculation in the commodity markets, there are other factors that have not been discovered that I hope at some future date someone takes a look at, maybe some excessive profiteering going on between that farmer and the consumer, because I have been seeing the quarterly reports. There are a lot of people that have their hand in the till, and it is excessive.

Energy prices no doubt have a huge impact, weather-related production problems, and like I mentioned, a lot of people want to blame corn ethanol for everything, but wheat and corn are not grown on the same acreage. That shifted 20 years ago, and that is because wheat is a less profitable crop. Most wheat production in acreage terms that increased both last year and this year. The problem was we had major weather-related disasters in all the major wheat-producing areas.

The other thing was with rice, and we definitely had a worldwide problem with rice—not with the U.S. rice crop, which is bigger than it was even 3 years ago. But most rice, 90 percent, is consumed within 60 miles of where it is produced. It was other worldwide areas.

And, of course, there is the weak dollar. Several years ago, we did a chart—and I did not bring it with me, Mr. Chairman, but if you chart the strength of the dollar versus the value of commodities and commodity prices, you will see that when the dollar is weak, and it has reached its 30-year low, you have skyrocketing commodity prices on the markets.

And probably more the issue today is the speculation in the commodities market. Is this having an effect? We would say yes. We do not fully know because we feel we do not have the full transparency needed to be able to address the problem.

We have called on the U.S. Commodity Futures Trading Commission to do the following:

Conduct a thorough and comprehensive investigation regarding the recent activities in the commodities market, including an explanation of the cotton market situation, which in a couple of weeks, we saw cotton prices on the futures market skyrocket. And some people say, well, that is probably market fundamentals, but it is not. We have cotton running out our ears. We have more cotton than we know what to do with. And when those prices went up, the cotton farmer could not get but about half that price bid to him. So there is something funny going on there, and it is not based on fundamentals, and we have asked for an investigation.

We have asked for them to increase the transparency. Obviously, some of the sophisticated trading components on the futures markets have allowed certain transactions not to be reported through a clearinghouse on swaps, etc. It is pretty tough to say, as I think the CFTC has said, we do not see a problem when you do not know fully what is going on.

Place a moratorium on any new commodity index trading, and evaluate the role and impact that the over-the-counter trading swaps are having on the market.

Approve a proposal to clear swaps in certain over-the-counter positions in an effort to create more transparency; not expand speculative limits, which was proposed in 2007; and take a broader look at the concept of manipulation.

I am not really an expert on all these trading instruments, but last January and February, I started to get calls from the countryside where farmers were being shut out of using one of the most important financial risk tools that they have utilized over the years, and that was the ability to hedge the price of their commodities into the future, after harvest.

As I mentioned, a lot of farmers have faced skyrocketing input costs, greater than ever. We have seen the biggest increase in inputs, yet they do not have the crop yet. And the way they protect their risk is to be able to contract it for delivery in the future. Many of those contracts were precluded because the tremendous rise in the commodities futures trading, the price on the markets, created a demand for margin calls. One country elevator in Kansas called me early in February or March and said they had a million bushels of wheat contracted with farmers for fall delivery, and their margin calls were $600,000 a day, 60 cents for each bushel.

The problem becomes that the local elevator has a credit limit, just like with any business, with their bank. They were bumping up against their credit limit. So, in turn, they quit allowing that producer that tool to be able to manage his financial risk into the future.

So it has had an impact. It has had an impact that so far we have not received satisfactory answers, I think, from the regulators or anyone else, and I commend you and the Members for holding this hearing. I also commend Senator Levin for his work on the farm bill, the veto of which hopefully will be overridden here shortly, and on closing the Enron loophole, and maybe we ought to close the latest loophole with the swaps. Thank you.

Chairman LIEBERMAN. Thanks, Mr. Buis. You provided us with a really good perspective from the farm, and I appreciate it.

Let's do a 6-minute first round for each of the Senators because we have a good number of Senators here. We will keep going as long as Senators have questions.

Mr. Masters has reached, it seems to me clear in his testimony, a baseline conclusion, which is that financial speculators, particularly index speculators, are contributing, I would say significantly, to higher commodity prices. Have I done you justice in that conclusion, Mr. Masters?

Mr. MASTERS. That is right, Senator. It is important to understand that index speculators are a different—they are basically a subset of traditional speculators. I have no issue with traditional speculators. Their very nature of being passive, being long only, being buy and hold—these things make them wonderful investors in the capital markets, but it makes them terrible investors in the commodities markets.

Chairman LIEBERMAN. In other words, because they have a distorting effect on the markets and on the price of commodities.

Mr. MASTERS. That is right. You have a situation in which they are effectively stockpiling these commodities via the futures markets, and they never use them. It begs the question, is anything an

asset class? I mean, just because it is uncorrelated or it goes against what stocks and bonds have typically done in the past, is it worthwhile? Is it something that we should allow?

Chairman LIEBERMAN. And I take it that you are not saying that the index speculators are committing illegal acts. What they are doing is legal. In some sense, you are saying it ought to be illegal because of its effect.

Mr. MASTERS. It is clearly a legal strategy, and the issue is the pension funds and the institutions that are doing it, they are not malicious. There is no malicious intent. There is no manipulative intent. But the issue is collectively it adds up. It is the analogy, where does the elephant sit in the room? Anywhere he wants. They look like one speculator.

Chairman LIEBERMAN. Yes. And I take it that, for instance, your conclusion and your recommendations do not of themselves deny, they may even confirm, some of what Dr. Steil has said about the impact of a weak dollar on their behavior.

Mr. MASTERS. That is right. It is important to understand that prices do not move by themselves. People buy and sell things. Markets move because people take action. And an institution may decide to allocate to commodities because they have a view of inflation or they have a view of currency fluctuations. But the currency fluctuations themselves or their view on fundamentals do not impact the prices. What impacts the prices is their decision to act.

Chairman LIEBERMAN. Mr. Masters, is it possible for you to reasonably estimate what impact the index speculators, as we have defined them, are having on commodity prices, either by percentage or by categorizing it as little, moderate, or significant? How would you describe it?

Mr. MASTERS. We think it is personally the single largest impact on commodity prices today because the size of the funds have grown. It is hard to understand——

Chairman LIEBERMAN. In other words, larger than the normal rules of supply and demand, weather realities, etc.

Mr. MASTERS. Well, what is important to understand, Senator, is that these are a factor in demand.

Chairman LIEBERMAN. Right.

Mr. MASTERS. They have dollars. Just like China is a factor in demand, these folks are a factor in demand. So if you are not studying investors, it is the old Willie Sutton analogy, if you will. Why did he rob banks? Because that is where the money is. I mean, if you understand where the money is coming from, then it is a little easier to understand what is motivating those decisions. Institutional investors are a focus for us because they are a component of demand today. And they are a component of demand that is one way, unlike traditional speculators.

Chairman LIEBERMAN. Right. Let me ask you to just spend a moment and further expand the two recommendations that you made. The second one was closing the so-called swaps loophole, and the first was to deal, through ERISA, I think you said, with pension fund flexibility. So just take them one at a time and just explain it in a little more detail what you would have us do.

Mr. MASTERS. Sure. Well, many of these pension funds, as you are well aware, are tax-exempt institutions. They were set up in

many cases for a public purpose. In many cases also, corporate pension funds are insured by the Pension Benefit Guaranty Corporation (PBGC). And so they have some benefits that are provided to them because of the theoretical public purpose that they provide. And the question that I ask is given this public purpose that they provide, should they be allocating to an asset class that has detrimental effects on American consumers at large? And I argue that they should not.

So in terms of ERISA, it could be ERISA or it could be some other regulatory framework. But the practice of index replication should be stopped.

Chairman LIEBERMAN. You would specifically stop it legislatively?

Mr. MASTERS. Yes.

Chairman LIEBERMAN. Just explain the swaps loophole one more time. I gather you would make sure that banks no longer have access to that loophole, that ability to do things that others cannot do in the markets.

Mr. MASTERS. Right. The swaps loophole effectively circumvents position limits, so a small investor is subject to position limits, but large investors——

Chairman LIEBERMAN. And a position limit means how much you can have within the market?

Mr. MASTERS. That is right. For instance, in wheat, you can have a total of 6,500 contracts for a total position limit. That is the total amount they have.

Chairman LIEBERMAN. OK.

Mr. MASTERS. These are regulated somewhat in the sense that they have—the spot market that month, they are not allowed to exercise or to take delivery. But that is not their intent. Their intent is just to hold the asset. So it really does not change their behavior.

Chairman LIEBERMAN. Whereas, the banks uniquely have no such limits.

Mr. MASTERS. I would have to get back to you on——

Chairman LIEBERMAN. Whether it is unique?

Mr. MASTERS [continuing]. The specifics there, but basically banks function as a surrogate for investors to be able to go and operate. In other words, if I wanted to buy $500 million worth of wheat, I could go to a bank, engage in an index swap. The bank would then buy the wheat for me, and I would own a swap contract.

Chairman LIEBERMAN. Right.

Mr. MASTERS. Effectively, I would circumvent position limits.

Chairman LIEBERMAN. OK. And, again, your second suggestion, therefore, is for us legislatively to close that loophole.

Mr. MASTERS. That is right. There should be transparency.

Chairman LIEBERMAN. Thank you. Senator Collins.

Senator COLLINS. Mr. Masters, let me pick up where Senator Lieberman left off. I find your basic premise to be compelling. It seems to me that when you have this massive influx of funds by the index speculators who are buying and holding, just rolling over, not selling, that would drive up the cost beyond what you would otherwise see.

On the other hand, I suspect if you talk to the managers of major pension funds or university endowments, they would argue that they are fulfilling their fiduciary responsibility under ERISA to get the best possible return for those who are going to be relying on those pensions in future years.

So it seems to me we have an interesting conflict here. Is the public better served by limiting the ability of these pension fund investors, these institutional investors, to come into the commodity markets because it is artificially driving up the cost beyond what you would otherwise see? Or is the public good better served by ensuring that those retirees get a better future return as a result of the investment in commodities?

So how do you resolve the conflict given that pension funds having a strong rate of return means fewer of them go broke and thus default onto the Federal Government's pension guarantee authority and that we want retirees to be able to have a good standard of living? I think that is a hard question.

Mr. MASTERS. I think it is not maybe as hard as one would look at it on the surface, Senator. First of all, for the pension funds, they have lots of ways to express their view. If they want to express an inflation view, for instance, they can express it by buying TIPS, which are Treasury Inflation-Protected Securities. That is a solution.

If they want to invest in energy, they can buy Exxon. They can buy ConocoPhillips. They can buy Halliburton. They can buy many other companies. They do not need to buy inventories. The analogy that I would use effectively is, should institutions be buying all the tickets at Disney World when they could buy Disney World common stock? I mean, it seems ludicrous to buy all the tickets when you can just go and buy the stock. Should they be buying inventories that we need for production? I think that is a key issue. So they have plenty of opportunities to be able to have returns.

There is another point which this brings up, and that is, I would imagine that if many retirees knew that their own pension funds were driving up the price of commodities, the price of gasoline that they buy on the way home from work, that they may not be happy to know that their own pension fund was costing them more in terms of groceries or fuel. I mean, I do not think people know this, and so this is one of the reasons I am here today. I wanted to raise awareness of this issue.

Senator COLLINS. Mr. Erickson, why don't you accept the basic premise here. Explain to me why Mr. Masters' study is not a logical conclusion.

Mr. ERICKSON. I do not think it is necessarily that there is a disagreement here. We in our testimony acknowledge that these passive investments can have a price-lifting impact on the market. As a point of distinction, one of the things that might help in clarifying, is that currently under the CFTC's rules and regulations, the pension funds cannot exceed speculative position limits on their own, nor can institutional investors.

Senator COLLINS. Only if they go through the bank?

Mr. ERICKSON. Which would be the swap, then.

Senator COLLINS. Right.

Mr. ERICKSON. But they are held to the speculative position limit so they cannot directly invest in those markets. There are several index funds that have petitioned the CFTC successfully in the last few years, I believe, to have exemptions from limits. And that is why we as an organization are saying to the CFTC it is appropriate to go slow here.

There are a lot of factors that are hitting this market at the same time. Demand is one. We have gone through them all. And this certainly is another factor that we need to take the time to more fully evaluate the potential impact.

Senator COLLINS. Do you think that there should be limits put on the ability of institutional investors to invest in the commodities market?

Mr. ERICKSON. That is a terrific question, and I think that gets back to just this whole idea that we really need to evaluate, and I will give you an example of a situation that gives us pause.

The wheat market that you referenced earlier in October 2006 had an extraordinarily high level of index fund participation, and there were underlying market events that required commercial users to try and exit their short positions. And what we found in that relatively thinly traded market was that those folks were not in their roll period and that it was not real liquidity for commercial market participants. In other words, there was a seizing up of the market for about 2 weeks in wheat in October 2006 that exercised a great deal of financial pain for a number of participants.

So there is that possibility, but we have taken the view that it is a reality that there is this interest, but we should not be going out and providing broad exemptions to this passive community.

Senator COLLINS. Thank you.

Chairman LIEBERMAN. Thanks, Senator Collins. Senator Coburn, good morning. You are next.

OPENING STATEMENT OF SENATOR COBURN

Senator COBURN. Thank you. A couple of questions.

Why should not all players in the commodity market be susceptible to a position limit, no matter where they are coming from? Does anybody disagree with that? Why shouldn't everybody be treated the same? Why should you have an advantage through a swap with a bank to be able to hold a position greater than what you would otherwise?

Mr. HARRIS. I guess I can speak to that. The position limits in the markets actually are set during the expiration month, so most of the position limits we are talking about do not actually apply to most of the index trading in the sense that in the month before delivery, position limits typically are not binding. We have what we call accountability limits where before the expiration month, the CFTC views the market, sees who the participants are, and if they appear to be large, we basically have a call with them, interface with them, and say you are accountable for the position size that you have. And so we monitor the market that way. So most of the index trading, since they roll out of a commodity before the delivery month, do not really actually hit a position limit.

So the position limits are usually in the marketplace because we want to limit the ability of a particular market class or a group of

market participants to corner the market to try to pinch demand, to try to do something on a short squeeze during the delivery month. So that is really what position limits were intended to do.

Senator COBURN. So, in essence, there is no difference between a swap and anybody else that is in the market?

Mr. HARRIS. For the most part. Now, it is true that the commodity index trading—and we monitor this, and I think in response to some of these concerns a few years ago is why we started producing information about the index trading in the agricultural products because the swap dealers were not handling index trading at that time. So when we looked at a swap dealer's position, it was almost always exclusively handling an index trade.

I guess the loophole might be classified in the oil or energy markets, we do have a large developed swap market that existed prior to this index trading. So if you look, for instance, at our data right now on swap dealer trades in crude oil, despite the fact that there is a tremendous amount of index trading in crude oil, the net position of a swap dealer as a group is actually short so that their business in handling over-the-counter swaps is actually completely offsetting the buying pressure from the index community.

Senator COBURN. I am having a little bit of trouble with our commodity markets. I thought we had commodity exchanges so that we would level out price swings so that the real producer and the real consumer could go to the commodities market and hedge their positions so they could have price stability. And it seems from what we heard here today, we have anything but that.

I think we need to go back and look at what the function of the commodity markets is if, in fact, they are not allocating this resource in a level way so the market can be transparent so people can make good decisions based on what the market is. How have we gotten away from the real function of a commodity market?

I sit here and think, well, if I am a wheat producer, I ought to be able to sell into it; and if I am a consumer of wheat, I ought to be able to buy into it. And I am not sure, other than the commodity traders, who are the ones that create the liquidity, that we ought to have anybody else participating in this market; in other words, that the market has gone from what its original function was to something that is totally a speculative investment vehicle. How do you answer that?

Mr. HARRIS. Well, I think from the CFTC standpoint, we do monitor it, and this is exactly why we are completely engaged with this development in the marketplace, and we are doing everything we can, week by week, day by day, to collect information and disseminate that information in hearings like this to make sure that people are informed about who is trading in our markets. Their Commitment of Trader Report comes out every week so we can see this.

Now, I think it is true, though, historically that there has been a large degree of speculation interest in all of our markets. That is kind of the way futures markets operate.

The one thing I would point out is that we have been engaged with the agricultural community as well. One of our agricultural hearing participants, we questioned them on whether there is a limit on the funds that are available, what is happening out in the heartland in access to finance, and why are people saying that they

are not being able to carry their position and being squeezed out of the market from their margin calls. We brought Federal Reserve employees and got some reassurance that, despite the pain involved in the financing and the arrangement of higher credit limits, there is a lot of ingenuity going on out there, people recognizing they know what their production costs are going to be, they have been able to go to the futures markets and hedge that risk. The problem then becomes in maintaining that financing cost and carrying that position to when the crop is harvested.

Senator COBURN. The elevator cannot do it.

Mr. HARRIS. One thing I will point out is in these markets there is a record number of short positions from commercial participants. So the markets do seem to be working, and there is more interest now than there has been in the past.

Senator COBURN. I am about to run out of time. I have two other questions.

One, are pensions presently excluded under their limits from doing a swap?

Mr. HARRIS. No.

Senator COBURN. So they can participate in the swap index with a bank right now. They are not excluded.

Mr. HARRIS. That is right.

Senator COBURN. And, number two—and anybody can answer this—worldwide demand for oil has risen around 1 percent the last 2 years. Nobody disputes that. The total global demand. Why are we seeing such price inelasticity with this? You have a 1-percent rise in demand, and you have a doubling in the price of oil. How does that explain a real market?

Mr. MASTERS. It has to be another factor.

Senator COBURN. That is right, and what is that other factor?

Mr. MASTERS. To us, it is financial investors. I mean, they have never been here before to any size. Effective in 2003, they showed up and they have been here since. Investors, institutional investors, never looked at commodities as an asset class before 2003.

Senator COBURN. So they are on permanent hold, they are just rolling a constant demand through the oil contracts and through the commodities contracts, the grain contracts. It is just a constant excess demand.

Mr. MASTERS. Well, it is worse than that because it has been growing, so it is more demand every year. And if you think about institutional investment in terms of worldwide pension funds, collectively they are around $30 trillion. So they have allocated less than 1 percent of their investment to commodity futures as an asset class. There are many consultants out there that consult with this community that have recommendations as high as 10 percent. We can see what prices have done so far with just less than 1 percent of demand. Imagine, if we have another 10 percent, what prices will do then.

There is lots of money on the sidelines looking at commodities as an asset class, and, again, that is why I am here. I am trying to raise awareness of this issue. This is absolutely important.

Senator COBURN. Thank you, Mr. Chairman.

Chairman LIEBERMAN. That is a really important question, and with Senator Pryor's indulgence, Senator Coburn, if you want to

ask it of any of the other witnesses. I would take a little time, if that is all right with Senator Pryor.

Senator COBURN. Anybody else have a comment on that?

Mr. HARRIS. I would like to address actually what we have seen in the data. One of the things we have seen, and particularly in the oil market, is that there is not only a demand for buying of the oil, but there is a tremendous uncertainty about supplies and uncertainty into the future. Five years ago, you could not buy an oil contract on the New York Mercantile Exchange (NYMEX) for beyond 4 or 5 years. Right now you can contract out more than 8 years in that space.

So there are tremendous anxieties about world supplies. Since we are dealing with a futures market, most of these anticipatory events are priced into our markets. So I would not classify it as strictly a demand-driven thing. There has to be a buyer and a seller for each one of these commodities. And we find that not only is the record short hedging going on in the agricultural markets, but the hedging that is going on in the oil spaces extending out way beyond what we saw in the past.

So the demand for hedging and the uncertain times that we live in, I think, is the primary factor in these markets.

Chairman LIEBERMAN. Dr. Steil, and then we will go to Senator Pryor.

Mr. STEIL. Senator, I agree that prices of commodities have skyrocketed, particularly over the past 6 years, and you cannot explain all of it looking at "fundamentals." Fundamentals will only get you so far. But that does not mean that the interest in commodities as an investment vehicle has been willy-nilly. It tracks very closely developments in U.S. monetary policy and the decline of the dollar. And there is a deep, historical reason for that. If you go back throughout all of human history, until 1971, specific commodities played the role of money. It was often gold. It was often silver. But whenever people coalesced around one form of commodity as money, you saw the price of that commodity go up vis-a-vis other things.

For example, in the late 19th Century, when countries around the world decided, voluntarily, to join the gold standard, demand for gold around the world went up, and the price of gold vis-a-vis other things went up very significantly.

In the 1970s, that was a very bad period for the dollar and U.S. monetary policy, and, not surprisingly, people turned to commodities.

When the Paul Volcker-led Federal Reserve restored the credibility of the dollar, you saw commodities prices plummet, and we really benefited from that for a very extended period of time.

So when we ask, do commodity index investors push up commodities prices, undoubtedly they do. We have to say that anyone who buys commodities because they are looking at them as a substitute for money is pushing up commodities prices. And I agree with you, we should be deeply concerned about it. But I think it is very important that we ask ourselves why they are doing it.

Chairman LIEBERMAN. That is very interesting. So really what you have said is not inconsistent with Mr. Masters' conclusions about the impact of speculation on commodity prices. You are ex-

plaining why rational participants in the markets, worried about the decline of the dollar, the value of the dollar, will move to commodities to maximize their returns.

Mr. STEIL. The index investors, as it were, are the messengers, and I am concerned if we focus all of our public policy attention on the messengers, we are just going to induce them to send us the message through other vehicles.

Chairman LIEBERMAN. Yes. This is a good point, and this goes back to Senator Collins' point, because there is obviously a benefit. The pension managers are trying to maximize their returns for the beneficiaries of the pensions. But then if the managers of the pension funds do it through the commodity index speculation, then, of course, it has this terrible effect that we are hearing about or, at least, certainly contributes to the extremely high commodity prices.

So I hear you, too, Dr. Steil. You are saying maybe Mr. Masters has a point, we should take some action there, but do not think that is the end of the problem; that really the underlying problem is that we have got to strengthen the dollar again.

Senator Pryor.

OPENING STATEMENT OF SENATOR PRYOR

Senator PRYOR. Thank you, and I want to thank both of you for this hearing. It is both interesting and helpful.

I would like to start by following up on some of Senator Coburn's questions and also some of the things that you talked about in your opening statements and previous testimony.

Mr. Harris, I will just pick on you since you are first at the desk. Just for clarification, the trading volume for commodities over the last 10 years has gone up considerably. Is that right?

Mr. HARRIS. That is right.

Senator PRYOR. And about how many times has it gone up over the last decade?

Mr. HARRIS. Total, probably like 600 percent or so.

Senator PRYOR. OK. And I am not sure that I got a clear answer on this from earlier testimony, but if we could just try to get a consensus on, for example, in the oil markets, what percentage of the price for oil today is based on speculation? If the speculators were out of the market, so to speak, how much difference would you see in a barrel of oil?

Mr. HARRIS. I guess from our standpoint, speculators have to be in the market to be able to provide prices.

Senator PRYOR. I understand.

Mr. HARRIS. I would say we would not have a market if there were no speculators.

Senator PRYOR. Right. But you understand what I am asking?

Mr. HARRIS. Yes. I mean, this is what we have been chasing down.

Senator PRYOR. Yes.

Mr. HARRIS. We have been trying to do study after study and trying to figure out the impact of different classes of traders.

Now, the one thing we do not do in a market is we do not ask the traders' intent when they come to our market, but we know generally how they are classified. So we know a swap dealer from a floor broker from an index trader, for instance. So in the oil mar-

ket, in particular, we have been looking for any footprint that shows from a daily price movement and a daily change of their positions whether commercial participants or non-commercial groups have been moving the price. We have yet to date to document that any group of speculative trades are moving prices. The general conclusions we get from the day-to-day look on who buys on every day and what prices change on those days typically results in the fact in my testimony that if prices are up today, we will see a lot of speculative types of traders buying tomorrow. So that is the regularity we see.

Senator PRYOR. But you cannot really point to a dollar amount or percentage that type of investor adds to the price.

Mr. HARRIS. I think my colleague John Fenton last week, I believe, testified. He would say zero.

Senator PRYOR. OK.

Mr. HARRIS. Since we cannot find a footprint.

Senator PRYOR. Does the rest of the panel agree with that?

Mr. MASTERS. I certainly would not. I mean, what moves prices? Magic? There is somebody buying and selling. I mean, clearly speculators, with the increase that they have had, they have to have had impact. There is just no question.

One other comment in clarification of that. We do not actually know what the index traders are in crude oil because the CFTC does not release that data. We only get it on the 12 agricultural commodities. It would be helpful if we could actually get that data from the energy markets as well as from the metals markets, something the CFTC currently does not provide.

Mr. HARRIS. I would interject there that we do not provide it because we actually do not have it. We have classes of traders like I mentioned, and since a swap dealer in an agricultural product is almost exclusively doing index trading, we know that swap dealing trading is index trading. In the metals and the energy space, we know the swap dealers have vast amounts of other trading business that contaminates the index trading that they report to us.

Senator PRYOR. Did you all want to add anything to that?

Mr. BUIS. Senator, I would just add that I think all this calls for the modernization of giving CFTC the tools to accurately monitor all these newer trading schemes that have come up over the last couple decades. You cannot find out there is a problem if you cannot count it. And through the swaps and other mechanisms, I am not sure everyone is having a complete transparent look at what is going on.

Mr. STEIL. Senator, I would just add that the International Monetary Fund (IMF) recently suggested an estimate that about $25 of the recent increases in the cost of a barrel of oil could be attributed to the change in the level of the dollar since about 2002. One thing that I find quite telling is, as you will see in my written testimony, these sharp movements in prices of commodities are highly correlated with each other, so that very different assets, like wheat and oil, are moving upward together in tandem with the decline of the dollar. So you will see in one figure I show side by side the price of oil and wheat measured in dollars obviously trending up; and the price of oil and wheat measured in gold over the course

of the decade, and they are both very flat. So this is a phenomenon that really cuts across almost all asset classes within commodities.

Mr. ERICKSON. Two points. First, I think from our perspective, speculative liquidity is absolutely critical to well-functioning markets from a commercial perspective. People who are in the markets to hedge their risk to price movements need that speculative liquidity day in and day out to be there. The passive investor raises some new issues for us.

Second, just maybe to build on Dr. Steil's comments, not only have we seen this increase in all asset classes of wheat and agricultural commodities with oil, there is an absolute correlation that has emerged where agricultural commodities are now tracking energy commodities really almost to their parity energy value levels, something that was not seen before the last 5 years.

Senator PRYOR. And the fact that agricultural commodities are tracking so closely with oil commodities, what conclusions do you reach from that? Why is that happening?

Mr. ERICKSON. Well, the energy value of commodities, there has been some work done basically trying to correlate Btu energy values of corn and wheat with oil. And at some point, the highest and best economic value for the food commodities is to use them as energy because of their energy value. It is not just biofuels. It is decisions of whether to use pure vegetable oil as a substitute for diesel fuel in running plants.

Senator PRYOR. OK. Thank you, Mr. Chairman.

Chairman LIEBERMAN. Thanks very much, Senator Pryor. Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman.

I quoted before the analyst for Oppenheimer and Company who said ". . . speculators have seized control and it is basically a free-for-all, a global gambling hall, and it won't shut down unless and until responsible governments step in."

The president of Marathon Oil Company said that "$100 oil is not justified by the physical demand in the market. It has to be speculation on the futures market that is fueling this."

The oil analyst for Citigroup said that the larger supply and demand fundamentals do not support a further rise and are, in fact, more consistent with lower price levels.

At a joint hearing with Senator Dorgan's Subcommittee on Energy we held last December at the Permanent Subcommittee on Investigations, a man named Edward Kraples, who is a financial market analyst, testified, "Of course, financial trading speculation affects the price of oil because it affects the price of everything we trade. It would be amazing if oil somehow escaped this effect."

So there is a whole lot of expert opinion in terms of the role of speculation, and the best estimate we had, Senator Pryor, when you asked the question: What percentage of the price of oil could be attributed to speculation? Our Subcommittee reached a conclusion, when oil was $70 a barrel, that about $20 of that $70 was the result of speculation.

Senator PRYOR. That is why I asked that question.

Senator LEVIN. In supply and demand, that is where crude oil stocks are, right smack in the middle of the historical level of inventory for crude oil.

As a matter of fact, since December 2007, crude oil inventories have gone up. At the same time, the price continues to go up. So if supply and demand were working, as the supply went up, the price would go down. But the price since 2007 has gone up—I had the figure here—from $90 a barrel to $127 a barrel. So you cannot just point to supply, shortage of supply, when our inventories are going up.

We have a chart, which I want to put in front of our witnesses, that has to do with the amount of speculation.[1] This is the amount of speculative purchase of future contracts, contracts for future delivery of crude oil, since 2000. I think, Mr. Harris, you would probably say, well, that is no proof that there is any relationship to the price of gasoline, but it sure has accompanied the increase in the price of gasoline.

You may say, well, the first people who buy are the commercial folks, and then the speculators the next morning buy at last night's commercial price. Well, it is also true that tomorrow, then, the commercial people will be following the speculators' purchase today. I mean, your solution to the chicken-egg problem here is that the speculators are the ones that follow rather than support and sustain the commercial purchases, the real hedgers. And I do not think there is any more logic for your argument than there would be for mine, the reverse.

What we do know is that the amount of speculation has gone up dramatically along with the price of oil and that there is an awful lot of experts out there who say that it is speculation which has been a significant cause.

I could not agree with you more that currency differences are a cause. Of course, it is a cause. The value of the dollar going down is a cause. But to say that does not mean that speculation is not the cause. It just means there are other causes. And there are other causes.

Mr. Erickson, I think you talked about some upward push from speculation. Have you put a dollar amount on that push?

Mr. ERICKSON. I have not, no.

Senator LEVIN. All right. Mr. Masters, you really have pointed out very effectively and dramatically the role of additional funds into the market in terms of the price of oil. Are you able to estimate how much of the $125-a-barrel price for oil is the result of either the hedge funds or the index funds, particularly the index funds, coming into the market? Have you been able to put a dollar amount on that?

Mr. MASTERS. I think that is a tough question to answer. I think the answer is nobody really knows specifically. But I would say that when we talk to refiners and other industry contacts, they consistently come back to us and say, net of speculation, oil would probably be in the $65–$70 range today. They are the ones that make gasoline so I am going to rely on their judgment.

Senator LEVIN. Another chart that I want to show to our witnesses shows the increase in the amount of speculative purchases since 2000.[2] The bottom line there is the amount of future con-

[1] The chart referenced by Senator Levin appears in the Appendix on page 135.
[2] The chart referenced by Senator Levin appears in the Appendix on page 136.

tracts. It has gone up about double. The top line is the amount of speculative purchasers of future contracts. It has gone up about 1,100 percent. And, by the way, the bottom line includes the index funds, so that if you put the index funds where they belong, which seems to me is logically in the speculative category, that lower line would probably be totally flat; and that upper line, which is the amount of speculation, would be even more dramatically going up.

So, Mr. Harris, you are CFTC. You are supposed to be the cop on the beat here. You are supposed to be regulating excessive speculation, and I do not think you even recognize its existence. I do not mean you personally, I mean the agency.

Mr. HARRIS. Right. Well, I would say exactly the opposite. The agency has been engaged with this particular development for years.

Senator LEVIN. Engaged?

Mr. HARRIS. Yes. We started studying——

Senator LEVIN. I do not mean studying. I mean doing something about it.

Mr. HARRIS. Well, I cannot speak to enforcement cases we have. We could give you a briefing on some of those. But we do have enforcement cases in this particular market.

Senator LEVIN. In excessive speculation in oil?

Mr. HARRIS. Well, I am not privy to everything there, but we could arrange for you to talk to——

Senator LEVIN. Well, do you know whether or not there has been enforcement against excessive speculation in oil? This is oil trading I am talking about.

Mr. HARRIS. We do not have, I believe, any public——

Senator LEVIN. I am not asking for the names. I am just asking you if you know of any enforcement action.

Mr. HARRIS. Strictly based on excessive speculation? Not exclusively on that, that I know of.

Senator LEVIN. Strictly, not exclusively?

Mr. HARRIS. Right.

Senator LEVIN. You sound like a hedger.

Mr. HARRIS. Well, mainly because one of the things we do is segment my fundamental economic research from the Enforcement Division.

Senator LEVIN. But you could still know whether or not——

Mr. HARRIS. Well, I would say our Department of Market Oversight (DMO), and our put-together office monitor this. We have updated these studies.

Senator LEVIN. You monitor, you update, you study. You do not do a darn thing about it. That is the problem. You are supposed to be the cop on the beat. You are our regulator. The reason we closed the Enron loophole was to get a regulator. There was no regulator when it came to electronic trading, so we wanted a regulator there. We want a cop on the beat. You do not see the problem. You do not act against that incredible, dramatic increase in speculation, as far as I can tell, indeed you do not even recognize it. Your studies cannot even find a relationship between—we had a case involving a hedge fund, Amaranth. They held 70 percent of the natural gas market on the NYMEX. Winter natural gas prices went up dramatically. We had a CFTC witness in front of us at the Permanent

Subcommittee on Investigations who said they could not find any role of speculation in that. This was a firm that had 70 percent, I believe, of the NYMEX natural gas market. Even then the CFTC saw no evil, heard no evil, spoke no evil, and did nothing.

So I am just telling you, to me, unless the CFTC is going to act against speculation, we do not have a cop on the beat. No matter how hard we try to close the loopholes, without a cop to enforce it our efforts are not going to succeed.

I went over. I apologize for going over, and I should not close without giving our witness a chance, but that is up to the Chairman if he wants to——

Chairman LIEBERMAN. To Mr. Harris?

Senator LEVIN. Yes.

Chairman LIEBERMAN. Do you want to respond, Mr. Harris?

Mr. HARRIS. Well, I think we are on record as having a record number of enforcement cases. I think Amaranth was an instance where——

Senator LEVIN. On oil?

Mr. HARRIS. On natural gas in particular, where we were not getting the information. I am fairly certain at this stage that we are getting information from all the traders in the oil market. There is an over-the-counter market that exists for these products that we do not see. That is entirely unknown to us.

Senator LEVIN. Thank you.

Chairman LIEBERMAN. Thanks, Mr. Harris. Thanks very much, Senator Levin. Excellent questioning. Senator McCaskill.

OPENING STATEMENT OF SENATOR MCCASKILL

Senator MCCASKILL. Thank you.

I am curious, Mr. Harris. If we have oil company folks up here and they raise their hand to take an oath and testify that speculation is accounting for anywhere from $30 to $50 a barrel for the price of oil, it seems weird to me that you say we do not think it is having any impact. I mean, how come they know it and you do not know it? If you are supposed to be in charge of regulating this, how come they can say it, how come Mr. Masters can talk about it from the refinery capacity, but you say you cannot tell us what the oil companies can tell us? Shouldn't you know that? And if you do not know it, what tools do we need to give you so you can figure it out?

Mr. HARRIS. Well, I think we have some tools. One of the things we pointed out in my testimony is increased staffing and budgetary concerns that we have in being able to monitor these markets. But we have actually inquired to a number of people who have looked at that speculative premium, and when oil was at $60, we heard it was a premium, and it went to $80 and now some people say, again, $95 would be a good price.

And so we do see that there is a moving target from other participants. We have been, like I said, engaged in this debate, trying to figure out from the data what is moving prices. The other regularity we do find is when commercial traders come to the market to buy, they do move the price. So we can uncover who does move the price up in a large number of instances, and particularly in oil.

So we are doing the work to try to uncover exactly what is going on.

Senator MCCASKILL. Well, I think any specificity you can come with as to what you need to get the data—I mean, if you have got the data on commodities but you do not have it on oil, the people of America are about to take up pitchforks, and we are feeling the heat here in Congress—as we should. It is our job to feel the heat. And I think that what Senator Levin was trying to communicate to you is that it does not appear that our cop on the beat feels the heat like we do. And, there seems to be a sense of urgency in these halls about this topic, and I know that part of this as your job is to be careful, cautious, and modulated. But I think we are all frustrated because it appears that you basically are saying, no harm, no foul. And, clearly, that line should worry you.

Mr. HARRIS. I think clearly it does, and one thing I would welcome actually being here is to convey that message, that we are monitoring these markets on a daily basis. We are updating studies. We are referring different instances in particular cases to our Enforcement Division, and we do have an active engagement with both the commodities in agricultural and energy space.

Senator MCCASKILL. Well, I think the more you can do and the more aggressive you can get—I mean, if you were Popeye, I would give you a can of spinach right now. I think it is time to muscle up here and get busy, because if you do not do it, we are going to figure out some way in Congress to impose it. And sometimes that has unintended consequences that probably most of the people at this table are worried about. But the pressure is real, and something is going to have to give.

Mr. Buis, I wanted to ask you from the farmer capacity, what impact are the current market forces having on the plans of farmers for crop planting for the next couple of cycles? I am interested from a pragmatic standpoint, these incredibly high commodity prices, what impact is that having on my producers in Missouri as to their planting cycles?

Mr. BUIS. Well, I think the prices are doing a couple things. One, if you can capture the prices—which we have been precluded from capturing markets beyond this crop year. I think almost everyone has shut off offering hedge contracts for in the future. But you do see farmers follow the price. For example, 2 years ago, corn prices started to go up. Last year, farmers produced the biggest corn crop by far in history, almost 3 billion bushels more, which gave us a 13-billion-bushel crop. That is unheard of.

This year, I think you are seeing a shift back to soybeans——

Senator MCCASKILL. Because beans got so high.

Mr. BUIS. Because bean prices came up. You saw more acreage go into wheat. With the higher rice prices, I think you are going to see it. But farmers are like any other business. They want to make a profit. And for a very long time, we have not. We welcome the higher prices, but the problem is we are not being able to necessarily able to capture them. And at the same time, we have these skyrocketing input costs because of energy.

President Kennedy once said farmers are the only people that buy retail, sell wholesale, and pay freight both ways. It needs to be updated today because we also pay fuel surcharges both ways.

We are price takers, not price makers. We have no ability to pass that on. We are at the mercy of the marketplace, and when the marketplace does not work, regardless of what the charts show, it is not working for farmers out there right at the moment. Action needs to be taken.

Senator MCCASKILL. And the irony is that when I go to the Board of Trade in Kansas City, the pitch I get is how important that market is for the farmers in terms of predictability. Now, the irony of this situation is now we have these futures markets that are supposed to be helping the farmers, and they are not being able to access them.

Mr. BUIS. Absolutely.

Senator MCCASKILL. Now, something is really wrong here, that the very ability to be able to forward contract is being cut off to the people who need them the most.

Mr. BUIS. Absolutely, and if you look at wheat, for example—and we do have a shortage of wheat. The wheat stocks are at record lows. But wheat prices got very high in February and March when farmers did not have it and many were shut off from being able to forward contract that wheat for delivery after harvest. Now they are getting ready to harvest in States like Oklahoma and Texas, and prices are down to under $8 a bushel, almost half of what it was in those high times when they were shut out.

Senator MCCASKILL. There is certainly an irony there. Thank you, Mr. Chairman.

Chairman LIEBERMAN. Thank you, Senator McCaskill. Senator Carper.

OPENING STATEMENT OF SENATOR CARPER

Senator CARPER. Thank you, Senator Lieberman.

To our witnesses, we are grateful to you for being here. I said to Senator Lieberman and Senator Collins, when I was in for a short period of time earlier in the hearing, that we just concluded a markup in the Senate Banking Committee on a couple of important issues, and I have been detained there, but I am glad to be here before you have left, and we appreciate very much your testimony and responses to our questions.

While I was here for a little bit earlier, one of the things that I heard in the conversation was that among the primary factors that are driving run-ups in the commodity prices for oil and other commodities is the drop in the value of the dollar, and that certainly is understandable. And I once studied economics a little bit, and so I believe in the law of supply and demand. As we see demand increases in places like China and India for oil products, that certainly would have some effect.

But I sense from a little bit of what you have said, and what I have read and heard elsewhere that there is more than just a drop in the value of the dollar; there is more than just a change in supply and demand. There is more going on here than that. And I would just ask you, is there any consensus from this diverse panel as to what beyond those two factors has caused the price of a barrel of oil to go from, about a year ago, roughly $60 or $70 to, today, $120 or so? What else is going on here? And what, if anything,

should we in Congress do about it? And what, if anything, should the Executive Branch of our government do about it?

I am happy to start with Mr. Harris, if you do not mind.

Mr. HARRIS. Well, I guess from my perspective, the fundamental change in the market was highlighted by Dr. Steil. I mean, that particular underlying fundamental factor, interest rates and using commodities as a portfolio hedging tool is the driving force here.

We have been searching for behavior in our markets and behavior across markets, and like I mentioned in my testimony, we see market prices falling in live cattle and hog markets, where the percentage of index traders is actually greatest. Almost half those markets is participation by index traders, and yet those prices are falling. So from the market operations standpoint, we do not see where there is a lot of regulation that is going to be beneficial.

I think the other related topic is that we do have farmers that we are hearing from that are having issues with margin calls. One of the proposals has been to raise margins. Well, we already know what happens when people have higher margins to meet. It drives small elevators and grain dealers out of business. And so that gets at the wrong end of the problem, I believe.

So I guess my personal feeling, after looking at all this data perpetually for the last 9 months since I have been in this job, is that there are fundamental reasons in the broad economy and worldwide that move these prices.

Senator CARPER. And the second half of my question was what advice do you have for us, if any, as to what we should be doing in the Congress to respond to the run-up in the prices, particularly the food commodities, but especially oil for my interest. And what advice do you have for us? What advice do you have for the Administration?

Mr. HARRIS. Well, I think the chairman of the CFTC would probably like me to be a little bit more tenuous in those recommendations on policy. But I would focus on those broad economic consequences and broad economic policies rather than trying to pinpoint behavior necessarily in the marketplace.

Senator CARPER. All right. Thank you. Mr. Masters.

Mr. MASTERS. Sure. I believe your question, Senator, was——

Senator CARPER. I am looking for some advice. I am trying to find out what else is going on here other than the two factors we have mentioned and what advice do you have for the Legislative and Executive Branches.

Mr. MASTERS. All right. Well, we are really focused on index speculators, as we have described in our testimony. We think that is the primary or one of the primary drivers here.

It is interesting that everybody on the panel talks about fundamental factors and whatnot. What we are talking about is participants. Fundamental factors do not drive prices. Participants acting on the perception of those fundamental factors drive prices. There is a key difference. It takes people to drive prices.

So, clearly, we feel like index traders or index speculators are a group that really have no place in the commodities futures markets and their practices should be excluded.

Senator CARPER. Excluded by whom?

Mr. MASTERS. By Congress, either through ERISA or through some other legislation. So that would be one solution.

The other solution we offered earlier in our testimony was to close the swaps loophole which allows effectively unlimited speculation by that category of participant and others. And, again, whether or not it is in the contract month is really immaterial. What is important is that they have an impact on price. They are never going to take delivery, so having a restriction on them in the spot month that prevents them from taking delivery is not really a restriction. The key issue is to not allow the practice to begin with, because that is where the price behavior starts.

Senator CARPER. Good. Thanks very much. Mr. Erickson.

Mr. ERICKSON. Thank you. I guess I would maybe step back a little bit and look at, again, the fundamental of supply and demand. In the agricultural sector, we are looking at 60-year-low supplies for wheat. We are at 35-year or 40-year lows in global stocks for other commodities. And, I think the markets generally are crying for supply, and I think that may be in energy as well.

The International Energy Agency a week or two ago came out with its "sobering finding." It said, that if the world gave up all biofuels production tomorrow, we would have to find another million barrels of crude oil every day.

So I think the market is responding to a sense, a perception of scarcity across the board, in addition to other fundamental factors.

Senator CARPER. Thank you, sir.

Mr. Steil, I heard some of what you said, but if you want to add anything to that, please do.

Mr. STEIL. On page 6 of my written statement,[1] I included a graphic showing the changes in correlations between the U.S. dollar and specific commodities, and it is quite interesting. The correlation between the gold price and the price of the dollar has always been very tight, because historically, whenever the dollar has depreciated, people have bought gold.

What is new specifically since last year is the huge increase in the correlation between dollar depreciation and the prices of other commodities. This is brand new. Or at least we have not seen it since the 1970s.

For example, the correlation between wheat prices and dollar depreciation has become really quite remarkable. So it is clear that what is going on in the market is that people have been reacting to what the Federal Reserve has been doing very aggressively since last summer—that is, cutting interest rates, now for good reasons, with good motivations, in order to try to forestall a recession. But I would argue that some of the problems that they have tried to address with monetary policy—for example, the horrible interbank credit crunch—could be better dealt with, as I call it, on balance sheet with specific targeted programs that Congress could run that are explicitly funded.

For example, in December, in the *Financial Times,* I wrote an op-ed supporting the creation of a new Resolution Trust Corporation that would offer to buy up subprime mortgages at very deep discounts, which I believe would induce banks to get these mortgages

[1] The graphic referenced by Dr. Steil appears in the Appendix on page 217.

back on their balance sheet once they had a watertight price at which they could mark them and would induce other financial institutions in the industry to buy these things up knowing that there is a floor to the price.

Now, by doing something like that, we take the burden off the Federal Reserve, the burden off monetary policy, and stop inducing people to buy commodities as a substitute for the dollar.

Senator CARPER. All right. Thanks so much. My time has expired. For our last witness, very briefly do you have anything you would like to add?

Mr. BUIS. I would just add one thing. The most immediate relief is what you guys did last week in suggesting that the President quit filling the Strategic Petroleum Reserve. I would suggest you dip into that. And as far as the prices for farm commodities, I just remind everyone this is a country that has never had food shortages. We continue to produce. And as an elderly farmer once told me, "The best cure for high commodity prices is high commodity prices. It will attract more production."

We have been in a decade of low prices, and we are just now coming out, and I think you will see the productive capacity of farmers respond to higher commodity prices.

Senator CARPER. Thank you for those words of wisdom. Thank you. Mr. Chairman, thanks so much.

Chairman LIEBERMAN. Thank you, Senator Carper.

Mr. Buis, I was just thinking, if I am not mistaken, at the end of the Clinton Administration I believe President Clinton did go into the Strategic Petroleum Reserve and move some of what was there out into the market, and it did have an immediate short-term effect on prices. So it is something for us to think about, although, obviously, that is not the answer to the problem. But it is a form, at least, of temporary relief.

Mr. Harris, I think in having you here as the Chief Economist of the CFTC, we have also, based on the direction of the testimony and the interest of the Members of the Committee, made you into a spokesperson for the Commission overall, probably an unfair thing to do to you, but you happen to be the person here.

I have talked to Senator Collins, and I think that we would like to do another hearing here and have the chairman of the CFTC, and perhaps some others from the Administration, who design economic policy to respond to some of the specific recommendations that have been made here.

But pending that, and understanding that, and understanding your role, am I hearing you correctly in saying that for you personally, there is no additional statutory authority, that you would like to see the U.S. Commodity Futures Trading Commission have to deal with the run-up in commodity prices?

Mr. HARRIS. Yes, that is right, I think we have engaged with that process. We are happy, I think, with the closing of the Enron loophole that is in the farm bill right now. We are, as I mentioned in my testimony, hearing what is going on in the marketplace in agricultural and energy space, and we do have, I think, forthcoming fairly shortly some policy changes, and some of the issues there I do not think require statutory changes. I think this issue about whether index trading is visible in all commodity products is an

issue we have been engaged with to try to figure out how can we be more transparent there.

We can get estimates of that type of trading in some markets but not all, and I think those types of things I think we could probably handle internally without legislative input.

Chairman LIEBERMAN. Am I correct that you cannot handle internally what Mr. Masters has called the "swaps loophole"? Or can you? Would that require legislation?

Mr. HARRIS. I think we can handle that ourselves, yes.

Chairman LIEBERMAN. You do? And actually closing the swaps loophole?

Mr. HARRIS. Well, typically the CFTC does not set position limits, first of all, so we do not set the speculation limits, but we work closely with the markets that we oversee to make sure that the markets recognize that they are properly functioning correctly in our eyes. So I think we would have some moral persuasion and some other ways of actually engaging with the industry to say here is what we see going on.

Now, part of that issue is uncovering something that we see that is detrimental in our markets, so that is something that we have had a proposal from our agricultural market, for instance, to have a moratorium on commodity index trading, to have other types of things that we could execute within the Commission.

Chairman LIEBERMAN. Well, I hope you will take back with you the sense of urgency and, frankly, the favorable response that I believe most Members of the Committee have had to what Mr. Masters had said, understanding that is not the whole problem, that the other response here is that we understand that the weak dollar, which is in part the fault of government policy, is a part of the problem. In fact, perhaps it is a significant part of the motivation for the speculative activity. I hope you will go back to the Commission on that, and I would look forward, when we call the Chairman, to hearing what more the CFTC can do to deal with this problem because I think the current status of the response is unacceptable to us. And, believe me, we are speaking in rational Senate language. Our constituents are less diplomatic because they are hurting, and that is what it is all about.

I do want to ask you about one kind of authority you have now, which is, as was referenced, the authority to address excessive speculation. And as I understand it, the Commission's use of this authority has been limited and has applied primarily to trading dates or certain types of contracts and certain types of traders. But I wonder whether any of the kind of behavior—and this is perhaps a stretch, and if it is, we ought to know because we may want to change the law to give you more clearly defined authority—whether some of the kinds of activities that Mr. Masters particularly has pointed to of index speculation in the markets comes under that statutory power that you have now to deal with excessive speculation. Do you have an opinion on that?

Mr. HARRIS. Yes, I would agree that defining and determining what excessive speculation is is difficult.

Chairman LIEBERMAN. How would you define it?

Mr. HARRIS. Usually we look for a connection, and the way we are looking at that, is any one group of trader or type of trader

moving prices in response to their trading? So is there a real reason for the trading? And does that trading move prices in any way to the detriment to the rest of the market? That is precisely the types of analyses we are doing. We are doing it on a daily basis. We are aggregating it up to a weekly basis. We are looking at different time horizons, different intervals.

Chairman LIEBERMAN. Right.

Mr. HARRIS. Believe me, we are actively engaged in——

Chairman LIEBERMAN. Sure. And are you looking for an effect on the integrity of the markets or on the price?

Mr. HARRIS. A little bit of both. We determine market share of each individual trader, for instance, to make sure that there is no one group or one set of market participants in addition to each individual market participant not having a big market share. And then we try to connect changes within each individual trader or types of trader groups. We aggregate up to the commercial/non-commercial. We have been looking at moving the swap dealers into the non-commercial. We have been looking at different combinations of each subgroup of types of traders that we have in an effort to try to connect either their trading behavior with the price movements or their trading behavior with some excessive amount of participation in the market. And that is where we really come to the conclusion that since each trade involves a buyer and a seller, somebody is speculating and someone is hedging, despite the fact that there is this separation between hedgers and speculators, the amount of volume in our markets reflects a large degree of hedging in our market as well.

Chairman LIEBERMAN. As a baseline, do you believe that there can be such a thing as too much speculation in the commodity markets?

Mr. HARRIS. Yes, and that is, in fact, why we are updating our study on a weekly basis. We are looking at the numbers as they come out each week. We get a daily report. We have been running the thing. And one of my concerns is exactly that, we want to make sure we are at the cusp or we are in touch with the fact when prices seem to deviate from what we would expect to be happening in the marketplace.

Chairman LIEBERMAN. OK, thanks. My time is up. Senator Collins.

Senator COLLINS. Thank you.

Mr. Harris, my question is along the same lines. "Excessive speculation" seems to be a very vague term. You have talked a lot about studying the different movements in the markets, the players, and I guess the frustration that some of us have is it sounds very academic when we are dealing with oil prices at $127 a barrel. And it sounds very academic when our constituents cannot afford to heat their homes or fill their gas tanks.

What we are trying to get a better understanding of is not only the factors that are pushing up the prices, which seemed unrelated to some extent to normal supply and demand, as Mr. Masters has said, but also whether the Commission has the authority and the resources to do this job, to police these markets. So let me end by asking you a couple of questions.

First of all, in my opening statement I referenced what the chairman of the Commission told me about the staff declining by 12 percent over the past 30 years, and yet the volume of trade soaring by 8,000 percent. Do you believe that the Commission has adequate resources to monitor what is an increasingly complex market with new players?

Mr. HARRIS. I think we are doing the best job with what we have. I mean, one of the things we can do is use technology to leverage up and so if we have a market that is reporting 100 trades or 100,000 trades, basically our same analysis can run a couple nanoseconds slower. But I think it is a well-known fact that we are at record low staffing levels, that our budgets have been operating on a stilted budget for the last 2 or 3 years, that reauthorization is in the farm bill so we have plans already to do a technology upgrade to try to connect better with our marketplace, to try to make the transition from the data into the analysis smoother, that we have the people there that when we flag illicit behavior or suspect behavior in our markets, that we have the enforcement staff to go after those people.

So is there more we can do? Obviously. I think there is always more you can do in these markets.

Senator COLLINS. Well, let me ask you a second question, and that is about your authority. How would you define "excessive speculation"? There is a definition of fraud. You can probably identify price manipulation when you see it. But "excessive speculation," what does that mean?

Mr. HARRIS. Well, I would say I think we have been looking at this problem exactly that way. In the futures market, when two buyers show up, you are bidding on the same actual item in the futures market, you could each have a contract, and if a third person shows up in the market, we could write a third contract.

One of the areas that we are looking at is that mechanism and whether we can find some aspect of the writing of these contracts leveling off while prices continue to go up so that there does not seem to be liquidity added into the system, and yet prices still rise.

So those are the types of analyses we are trying to get our hands on.

Senator COLLINS. Well, Senator Levin showed you what I thought was a very compelling chart that shows the increase of speculative trades. Does volume determine whether you are finding excessive speculation?

Mr. HARRIS. I would caution against using volume as a proxy. One of the things that came out of that that we did not address is that one of the things we are finding is that we know, for instance, in the oil and energy space, there was a very well developed, large, over-the-counter trade going on. One of, I think, the positive developments of the last 5 years as partially reflected in those charts is the fact that more and more of these over-the-counter trades are based on whether it is credit concerns or other concerns that they have about counterparties are moving more of that trading onto our markets. So part of that increase reflects, I believe, trades that would have happened prior to this, over the counter with the traders on their trading desks without reporting to the authorities.

We think or we are fairly certain that a large degree of that is trades that we are seeing now that 5, 10 years ago we were not seeing. So in that regard, that is also consistent with the fact that our reported volumes are higher.

Now, we have talked with people on Wall Street who say that you can still contract in oil out to 2023, so if you want to get a 15-year oil contract, you cannot get it at the NYMEX but you do that over the counter. So there is still a large, over-the-counter market that we are not seeing, but I think part of the positive sign of that chart was that we are seeing more people in the organized exchanges, where we can see them, where we can monitor them; and when we see them acting in a way that is not beneficial to the rest of the market participants, we can step in.

Senator COLLINS. What would be your assessment of the impact on the markets if we were to adopt Mr. Masters' recommendation and somehow either amend ERISA or take other actions to limit or even prohibit large institutional investors from trading on the commodities market?

Mr. HARRIS. I think it is related to what I just said. One of the things we do know is that there is a large over-the-counter market for a number of these products, at least in the energy space.

Senator COLLINS. So you think that it would just go to the over-the-counter markets?

Mr. HARRIS. That would be part of the shift, I believe, yes.

Senator COLLINS. Mr. Masters.

Mr. MASTERS. I think that if you eliminated the practice through ERISA or some other regulation, they would not be able to go on the other markets. If it is a prohibited practice, they cannot do it, period. So whether it is traded on the CFTC exchange markets or it is over the counter, no pension trustee is going to do something that is blatantly illegal. They are just not going to do that.

Senator COLLINS. Right.

Mr. MASTERS. So, clearly, if you change the practice or prohibited them, it would make their decision much easier. They just would not do the practice.

Senator COLLINS. Mr. Harris, I am trying to get at a more fundamental issue, and that is, would it harm the commodities markets?

Mr. HARRIS. One concern we have—well, I guess generally speaking markets are most healthy when you do not have artificial limitations on who can participate. We have seen that when people are limited to the commodity space or futures in particular, they will transfer their trading to the options market. Or we noticed in the Minneapolis Grain Exchange, when their wheat contract went way up, a large degree of that trading went to the Chicago Board of Trade wheat contract, which really is not the same underlying product, but people were looking for an asset that is related.

So I think in some respects, you would be diminishing the effectiveness of hedging. We do not know how much information would not get to the market if that were the case.

Senator COLLINS. OK. Thank you, Mr. Chairman.

Chairman LIEBERMAN. Thanks very much, Senator Collins.

I do not want to go on too much longer at all, but, Mr. Masters, I appreciated your answer to the question about if we just tell pension funds they cannot do this kind of speculation and index specu-

lation in commodities, that they will not be able to do it anywhere. And that would have a significant effect on the problem you are describing, but what about others who we would not cover with that, who might either go to the over-the-counter or even overseas markets in commodities? Is there an answer for that?

Mr. MASTERS. I do not think that you can prohibit every investor from ever doing anything.

Chairman LIEBERMAN. Right.

Mr. MASTERS. We are in a large, interconnected world. That being said, it is extremely unlikely that the investment consultant community is going to recommend to university endowments, sovereign wealth funds, other pension funds, especially on this politically charged issue, to engage in index replication strategies when you have banned it for one group. I think that it is likely that many of those groups would probably get the message that this is not the kind of behavior that we like to see from our institutional investors.

Chairman LIEBERMAN. OK. This has been a very productive morning, and I thank all of you for the time and expertise you have brought. This is a wonderfully diverse panel. We had a good exchange of ideas. I think we learned a lot.

My own thought, just to provoke us to the next stage and try to focus the question, is that we might try to—and I am going to ask my staff to work with you, Mr. Masters. We might try to at least outline legislation in the two areas that you mentioned—limitations on index speculating by large institutional investors and closing the swaps loophole—and then bring in another panel of witnesses, including the chairman of the CFTC, and perhaps some others, and essentially ask them why not do this; or why, if they agree that we should. And that may focus the discussion.

My own conclusion is that index speculators are responsible for a significant part of commodity price increases that are really hurting a lot of individuals, a lot of businesses, and we ought to see if we can do something about it. Again, it is not illegal behavior. It is the old line from that old book. This was an alleged, slightly fictional New York City political boss at the beginning of the 20th Century: "I seen my opportunities, and I took 'em." And the reasons, as Dr. Steil has said, come back to the rest of the work we have to do to strengthen the dollar. But sometimes in the public interest we have got to limit the opportunities that people have to maximize their profits because the rest of us end up paying through the nose as a result, including a lot of people who really cannot afford to pay through the nose.

So that will take us to the next step, but I thank you very much. We are going to keep the record of this hearing open for 14 days. That is to allow any of you who want to add anything to your testimony to do so. You may get some questions. I know Senator Coleman, for one, had another hearing he had to go to, but he will file questions for the witnesses because he is very interested in this subject.

Again, I thank my colleague Senator Collins, and I thank all of you.

The hearing is adjourned.

[Whereupon, at 1:03 p.m., the Committee was adjourned.]

ENDING EXCESSIVE SPECULATION IN COMMODITY MARKETS: LEGISLATIVE OPTIONS

TUESDAY, JUNE 24, 2008

U.S. SENATE,
COMMITTEE ON HOMELAND SECURITY
AND GOVERNMENTAL AFFAIRS,
Washington, DC.

The Committee met, pursuant to notice, at 10:30 a.m., in room SD–342, Dirksen Senate Office Building, Hon. Joseph I. Lieberman, Chairman of the Committee, presiding.

Present: Senators Lieberman, Levin, Carper, Pryor, McCaskill, Collins, Coleman, and Warner.

Also Present: Senator Isakson.

OPENING STATEMENT OF CHAIRMAN LIEBERMAN

Chairman LIEBERMAN. Good morning. The hearing will come to order. Welcome to this Committee's third hearing on the subject of skyrocketing food and energy prices.

In the last two hearings, we focused on the role of financial speculators to determine if their increasing participation in the commodity markets is a cause of rising food and fuel prices. Evidence presented to this Committee has persuaded me that speculators are, in fact, a significant contributing factor to the economic distress now being felt by American consumers every time they stand in the grocery store checkout line or pay for a fill-up at the gas pump. That distress, obviously, is being also felt in many ways by American businesses, small and large.

That is why, at the end of our last hearing, Senator Collins and I asked our staffs to draft legislation that might address this problem. Last week, we made those drafts public, posted them on the Committee Website, and solicited public comment. Today, we are going to take testimony on these draft proposals which we hope and believe can bring relief to American family and business budgets.

Since we initiated this inquiry nearly 2 months ago, a lot has happened on this subject and with this problem. The U.S. Commodity Futures Trading Commission (CFTC) itself has announced at least four new initiatives to address speculative activity. And last week, the chief executive of the New York Stock Exchange (NYSE) said that investments by large institutional investors, particularly pension funds, were completely altering the supply and demand for commodities. Our colleagues here in Congress have introduced at least eight bills on this subject, most of them focusing

on market transparency. But some go further by seeking to bring foreign or over-the-counter markets under Federal regulation.

Concern about speculation in commodity markets and its impact on prices is not confined to the United States. At the recent G–8 meeting, a number of our closest allies and trading partners, particularly France, Italy, and Japan, raised this concern. And, in fact, the final G–8 statement from that meeting asks national authorities, "to examine the functioning of commodity futures markets and to take appropriate measures as needed."

Austria has proposed a European-wide tax on commodity speculators, and a report recently released by the International Monetary Fund (IMF) concluded that, "Speculation has played a significant role in the run-up in oil prices as the U.S. dollar has weakened and investors have looked for a hedge in oil futures (and gold)."

So what we are doing here today is not in isolation and not without very credible support. The three draft discussion documents Senator Collins and I made public last week would: One, extend transparency to unregulated commodity markets by closing the so-called swaps loophole; two, create a seamless system of speculative position limits that would apply to all commodity trading—on the exchanges, over the counter, and on foreign exchanges; and, three, restrict commodity investments by large institutional investors that invest through index funds. And I want to stress that the legislative proposal would restrict commodity investments by large institutional investors only so far as they invest through index funds.

I want to be clear that when I talk about financial speculators, I am talking about those looking to commodity price appreciation or depreciation to generate profits. Increasingly left on the sidelines are bona fide hedgers—the farmers, the fuel oil dealers, and others for whom the commodity markets were originally created as a way to reduce their risk by locking in prices on next year's crops or oil production.

Let me also be clear that I understand that some speculation in commodity markets helps them function, but the speculation taking place now has gone way beyond that. One of the public comments we received through the Committee Website is, I think, particularly insightful and instructive. It came from a commodity broker in Iowa, and it reads like this: "I have seen firsthand the effect that these index funds have had on the agricultural markets. My customers are farmers, and they are getting tired of not being able to make sense of the markets. Although they are happy with the price of grains, almost to a man they will tell you that prices are too high. With these high prices, the price of their inputs has gone up as well, i.e., land, rent, fertilizer, seed, etc. To my customers, the fundamentals of supply and demand mean nothing anymore. These index funds and exchange-traded funds are not living by the same rules that the CFTC set up for speculators. They need to be made to come into compliance with the speculative limit the rest of the market participants have to abide by."

That is real common sense from the heartland, and I think that voice of that commodity broker from Iowa is one that we should keep in mind as we consider what Congress can and should do about this legislation and this problem.

I also want to say—and I think it is important to say—that speculation in the food and fuel futures markets is not illegal. But that does not mean that it is not very hurtful. To paraphrase a character in an early 20th Century political novel, speculators are just seeing their opportunities and taking them. Motivated by the weakness of the dollar and rising demand for oil and food, speculators are moving enormous amounts of money into commodities markets for the obvious purpose of making more money. But in so doing, they are artificially inflating the price of food and fuel futures and causing real financial suffering for millions and millions of people and businesses. The steady upward climb of the cost of food and energy in recent months is not simply the result of natural market forces at work. Speculation has passed the point where it provides stability to the commodity markets. It is now excessive and has consequences that are very harmful.

And that is why I believe our government must step in as soon as possible to protect our consumers and our economy because against the forces that are raising the cost of food and fuel, the average person simply cannot protect himself or herself.

Senator Collins.

OPENING STATEMENT OF SENATOR COLLINS

Senator COLLINS. Thank you, Mr. Chairman, for holding this critically important hearing this morning.

High energy costs are having a devastating impact on our economy and on our people, especially people in large, cold, rural States like Maine. Truck drivers, small business owners, fishermen, farmers, and countless others are struggling with the high cost of oil and gasoline. In Maine, where 80 percent of our homes are heated with oil, many families simply do not know how they are going to cope with the record high cost of heating oil this coming winter. For many of them, it is truly a crisis.

The high cost of energy is also taking a toll on businesses throughout our Nation. For example, the paper mill in Millinocket, Maine, recently announced that it would be closing down because it is no longer profitable due to the cost of oil. If this occurs, the community will be devastated by the loss of more than 200 good jobs.

What is troubling to me is that the harmful spike in energy cost does not appear to be caused solely by supply and demand factors, as the Chairman has pointed out. Compelling evidence gathered by this Committee suggests that excessive speculation in futures markets is also a significant factor pushing up the price of oil.

The increased cost of energy certainly reflects fundamentals, including the increased demand from China and India and the depreciation of the dollar. But massive new holdings of oil futures contracts by pension funds, university endowments, and other institutional investors who neither produce nor take delivery of oil also appear to be driving up prices. Their intentions may be simply to provide good returns and investment diversification, but many experts believe their activities are distorting commodity markets and pushing prices upward.

I am pleased to be working with Chairman Lieberman once again to write legislation that will help our Nation, this time by

preventing excessive speculation in energy and agricultural commodity markets. And I commend the Chairman for his far-sighted leadership.

I do have serious concerns about one major provision in the draft legislation, and that is the proposed ban on institutional investors using index funds to trade in the commodity futures markets. While I believe that the influx of money from pension funds, university endowments, and other institutional investors has had a detrimental impact on prices, prohibiting their investment risks harming current and future retirees. After all, pension fund managers are investing in commodities as a way to diversify their holdings, hedge against inflation, and improve returns, all in keeping with their fiduciary obligations. In my judgment, an outright ban would have unintended consequences for retirees relying on these pension funds.

That does not mean, however, that I do not believe that reforms are called for. I do. Senator Lieberman has proposed other policy options to address the effects of excessive speculation that make a great deal of sense to me. These proposals would limit the percentage of total contract holdings that non-commercial investors could maintain in any one commodity market and would close the swaps loophole that currently allows financial institutions to evade position limits intended to prevent an investor from cornering a market.

As we identify and evaluate these and other policy options, we obviously must take care not to cripple the usefulness of futures markets for the producers, handlers, and purchasers of commodities who need to lock in prices, hedge risks, and see clues for price trends.

There are two other issues that are of critical importance and concern to me. The first is "dark markets," and the second is resources for the U.S. Commodity Futures Trading Commission. There are still gaps in publicly available data to track the effect of speculation on prices—price manipulation that I fear could go undetected in certain markets because they lack regulation or because trades are not adequately disclosed to regulators. This is why I have called for increased regulation and transparency in futures markets to guard against excessive speculation and price manipulation. And it is why I, along with the Chairman—Senator Levin was a leader on this—supported closing the Enron loophole for electronic exchanges.

A related concern is ensuring that the CFTC has the resources it needs to collect and analyze data, monitor trading, and police markets. The Commission's Chairman recently testified that the trading volume of commodities futures contracts and options has soared from 27 million back in 1976 to more than 3 billion contracts last year. Yet today there are fewer employees at the Commission than there were in 1976, leaving much more work for far fewer staff. With Senator Lieberman's support, I hope to include provisions in our comprehensive bill that will rectify this resource shortcoming.

Beyond lacking sufficient resources, I believe the Commission has been less than aggressive in using its existing authorities. To be fair, the Commission deserves credit for its recent investigations

into market activity, its stronger data-sharing agreement with British authorities, and its withdrawal of proposed rules to raise speculative position limits on agricultural commodities. But I would have felt better if the Commission had taken these actions more proactively rather than in response to prodding from lawmakers and public opinion.

As usual, we must perform a careful balancing act, not simply for the abstract goal of market efficiency, but for the concrete goal of easing hardship for real people who are struggling with inflated food and energy costs.

I welcome our panel of witnesses, and I thank them for helping us evaluate our policy options. Working together, I am confident that this Committee can develop effective measures to curb excessive speculation, guard against price manipulation, and protect consumers who are suffering from high food and energy prices.

And, again, Mr. Chairman, thank you for your leadership on this vitally important issue.

Chairman LIEBERMAN. Thanks very much, Senator Collins, for that thoughtful statement, even the part in which you disagreed with one of my proposals. This is probably good because it will prove, contrary to public belief, that you and I do not agree on everything.

Senator COLLINS. That is true.

Chairman LIEBERMAN. And we will reason together, as we always do, on that. I thank the Members of the Committee who are here. I particularly want to, as I did last time, thank Senator Levin, who really was way ahead of the rest of us in focusing on, this problem that we are focused on now. I think Senator Coleman worked with him at some point along the way as well, and so their work is a preface to what we have done.

I also want to welcome Senator Isakson, not a member of the Committee but who asked if he could sit in on the hearing, and we are delighted to have him here.

We will go right to the witnesses now. I thank you for being here. I believe that there is a vote tentatively scheduled for 11:15 a.m., so we will try to move as quickly as we can and maybe rotate our departures to vote so we can keep the hearing going.

The first witness is Walter Lukken, Acting Chairman of the U.S. Commodity Futures Trading Commission. Mr. Lukken was appointed Acting Chairman in June of last year, but has served as a CFTC Commissioner since 2002 and currently chairs the Commission's Energy Markets Advisory Committee.

Thank you for being here, Mr. Lukken. We welcome your testimony.

TESTIMONY OF HON. WALTER L. LUKKEN,[1] ACTING CHAIRMAN, U.S. COMMODITY FUTURES TRADING COMMISSION

Mr. LUKKEN. Thank you, Mr. Chairman, other distinguished Members. I appreciate being here today to testify on the role of excessive speculation in the futures markets.

During the last few years, the futures markets have changed dramatically in both size and products and complexity, experi-

[1] The prepared statement of Mr. Lukken appears in the Appendix on page 222.

encing 500-percent growth in both volume and products listed. Today's exchanges are technology-driven corporations that trade electronically, 24 hours a day, all around the globe. Approximately $5 trillion of notional transactions flow through these U.S. exchanges every day. This description alone would make the oversight of these markets a challenge for regulators. But add to it the subprime crisis, record energy and commodity prices, the influx of financial funds into the futures markets, and historic low staffing levels at the CFTC, and it is clear that these are challenging times for this agency.

Recent substantial increases in the price of crude oil have put considerable strain on U.S. households. These issues are a matter of intense focus at the Commission due to the key role that futures markets play in the price discovery of these products.

The CFTC recognizes that these markets and their participants have evolved significantly in the last several years. Concerns have been raised about the role of speculators and index traders in these markets. As prices have escalated, the CFTC has pursued an active agenda to ensure that the commodity futures markets are operating free of distortion.

These initiatives fall into five broad categories: one, increasing information and transparency; two, ensuring proper market controls; three, continuing aggressive enforcement efforts; four, improving oversight coordination; and five, seeking increased funding.

The proper oversight of markets requires transparency. Market regulators must receive the necessary information to surveil the markets, study long-term financial trends, and evaluate policy changes as circumstances evolve. The backbone of the CFTC's market surveillance program is its large trader reporting system. All large traders must file daily with the CFTC their futures and options positions in the markets. This information enables the CFTC's surveillance economists to oversee all traders of size to ensure that no one is attempting to manipulate these markets.

As markets have become electronic and global, the CFTC has been working to expand its trade data collection to accommodate these trends. On May 29, 2008, the CFTC announced an agreement with the U.K. Financial Services Authority to greatly expand the trader data already received from IntercontinentalExchance Futures Europe on its linked crude oil contract that settles off the NYMEX crude oil benchmark, including receiving equivalent daily large traders reports on all months traded. This cross-border information sharing is unprecedented among global regulators.

The CFTC has also taken action to improve the transparency of index traders and swap dealers in the energy markets. In late May, the CFTC announced that it would use its special call authorities to gather more detailed data from swap dealers on the amount of index trading in the markets, and to examine whether index traders are being properly classified for regulatory and reporting purposes. These information requests have been sent, and the CFTC expects in the coming weeks to begin receiving more detailed information on index traders in the markets that are being conducted through swap dealers.

After analyzing this data, the CFTC will provide a report to Congress by September 15 regarding the scope of index trading coming

into the markets and recommendations for improved practices and controls, should they be required.

Beginning last fall and finalized last month, the Commission worked with Congress to enact legislation as part of the Food, Conservation, and Energy Act of 2008 (farm bill) requiring exempt commercial markets that trade linked energy contracts to provide the CFTC with large trader reports and impose position accountability and position limits on these products. Congress and this agency believed that these authorities were necessary to protect the regulated energy marketplace.

As noted earlier, linkages between contracts are not purely a domestic occurrence but happen across borders. Most energy and agricultural commodities are global commodities operating in a global marketplace, and the U.S. futures markets have been facing the challenges of cross-border trading and regulation for many years.

For more than a decade, the CFTC has utilized its mutual recognition process for foreign exchanges that allows U.S. institutions access to those markets by striking a balance between protecting the U.S. regulated marketplace and the acknowledgment that increased globalization of commodity markets requires international cooperation and coordination between governments.

With this balance in mind, last week the CFTC announced modifications to its Foreign Board of Trade process. After consultation with the British Financial Services Authority, the CFTC revised the access letter of IntercontinentalExchange (ICE) Futures Europe to require the implementation of position limits and accountability levels on its linked crude oil contracts. The CFTC will also require other foreign exchanges that seek such direct access to provide the CFTC with large trader reports and to impose position and speculative limits on those products. This combination of enhanced information data and additional market controls will help the CFTC in its surveillance of its regulated domestic exchanges while preserving the benefits of its mutual recognition program.

During these turbulent economic times, the environment is ripe for those who want to illegally manipulate the markets. In late May, the Commission took the extraordinary step of disclosing that, since December 2007, its Division of Enforcement has launched a nationwide crude oil investigation into practices surrounding the purchase, storage, trading, and transportation of crude oil products and their related derivatives contracts. Strong enforcement is imperative during this time.

Given the CFTC's size and the enormity of the global marketplace, the CFTC must also engage others in government as we seek to meet our important mission. Two weeks ago, the CFTC announced the formation of an interagency task force to evaluate developments in the commodity markets, which includes staff from the CFTC, the Federal Reserve, the Department of the Treasury, the Securities and Exchange Commission (SEC), Department of Energy, and the Department of Agriculture. I have also invited the Federal Trade Commission (FTC) and the Federal Energy Regulatory Commission (FERC) to participate as well, given their expertise in these related energy matters. The task force is intended to bring the best and brightest minds in government together to study these issues so we understand how the markets are functioning.

If it sounds busy, it is—especially given that the agency's staffing levels are near record-low numbers. Since the CFTC opened its doors 33 years ago, the volume on futures exchanges, as Senator Collins mentioned, has grown 8,000 percent while our staffing levels have decreased 12 percent.

As the agency embarks on new authorities and initiatives in order to respond to changing market conditions, it is imperative that these be met with adequate resources. The CFTC is in the midst of implementing the new farm bill authorities that were led by Senator Levin and others on this Committee, which require many programmatic changes in our legislation and just plain old hard work from a staff that is already under considerable strain. Additionally, the agency's staff is racing to implement the measures that I have outlined earlier in my testimony. Recall as well that our employees are full-time regulators, charged with overseeing these markets each and every day. Without proper funding, the agency will not be able to sustain this pace for much longer.

In summary, the Commission shares this Committee's concern for the current market conditions in the energy markets and for the high prices of crude oil and gas on consumers, workers, and businesses. These are difficult economic times, and the Commission recognizes the need to respond accordingly to ensure that futures markets are working properly for all Americans.

Thank you very much, and I welcome any questions you may have.

Chairman LIEBERMAN. Chairman Lukken, thanks for your testimony. I must tell you that I am disappointed that nowhere in your opening statement have you responded to the request that Senator Collins and I made in our letter of invitation to the witnesses, which is to offer comment on the three draft proposals. I am going to ask you about that in the question period.

I also must say that I hear that you have acted against manipulation, but I do not hear any recognition from you that speculation is a problem. And I understand you are busy, but most of the business that you have described sounds to me like study instead of action that will bring relief because this is a crisis in the real lives of people in this country every day. Senator Collins and I happen to both be from New England. We are thinking a lot about the cost of home heating oil this winter, and I just think the Administration and Congress have to get together and decide where the problem is and act quickly because the problem is urgent. And I believe that we have the power to offer relief, and shame on us if we do not. So I will come back to that in the question period.

The next witness is James E. Newsome, President, CEO, and member of the board of NYMEX Holdings, parent of the New York Mercantile Exchange, which is the main American exchange for trading in oil futures. He has been at NYMEX since August 2004. Prior to that, Mr. Newsome served as Chairman of the CFTC, beginning in December 2001, and before that was a CFTC Commissioner. In addition, Mr. Newsome serves on the board of the Dubai Mercantile Exchange, the Canadian Resource Exchange, the National Futures Association, and the Institute for Financial Markets.

Thanks for being here, Mr. Newsome. We welcome your testimony now.

TESTIMONY OF HON. JAMES E. NEWSOME,[1] PRESIDENT AND CHIEF EXECUTIVE OFFICER, NYMEX HOLDINGS, INC.

Mr. NEWSOME. Thank you very much, Mr. Chairman.

NYMEX is fully regulated as a derivatives clearing organization and a designated contract market, which is the highest and most comprehensive level of regulatory oversight for a trading facility. My comments today in this oral testimony are only as it relates to NYMEX markets and not to foreign boards of trade or over-the-counter markets.

The ever increasing cost of energy touches all aspects of our daily lives, and today it is quite possibly the most important issue facing both global and domestic economies.

The Commodity Futures Modernization Act of 2000 (CFMA) ushered in a period of phenomenal growth in derivatives markets. The CFMA has proven to be the gold standard of U.S. financial policy. For the most part, the value and success of the CFMA holds true today. However, neither the Congress nor the conference possessed a crystal ball, and it was impossible at that time to determine how some markets would develop. In at least two instances, markets have developed differently than anyone could have anticipated at the time.

First, an over-the-counter natural gas contract trading on an unregulated exempt commercial market could mirror an exchange-traded natural gas contract, and the two contracts could become very closely linked. Ultimately, the over-the-counter contract began to serve a price discovery function. Market participants could and did easily move positions from the regulated exchange to the exempt commercial market to avoid regulatory requirements such as position limits. This scenario was investigated by the Senate Permanent Subcommittee on Investigations chaired by Senator Levin and was addressed effectively in an amendment to the recently adopted farm bill.

Second, foreign boards of trade began offering futures contracts with U.S. delivery points to U.S. customers pursuant to CFTC no-action letters. Historically, foreign exchanges were permitted to offer direct access to their markets to U.S. customers based on a determination by CFTC staff that the foreign regulatory regime governing foreign boards of trade was comparable to that of the CFTC.

This approach worked very effectively until a foreign board of trade listed the look-alike of the NYMEX West Texas Intermediate (WTI) Crude Oil Futures contract without the level of transparency and market surveillance controls such as positions limits that are require on U.S.-regulated markets. It was never anticipated that the no-action process would be used in this manner.

NYMEX has suggested for 2 years that foreign boards of trade offering linked products should be required by the CFTC to provide the same level and quality of data and at the same frequency that U.S. exchanges provide to the CFTC.

In addition, we believe that no-action letters for foreign boards of trade offering contracts with U.S. delivery points should be conditioned to impose position limits and/or accountability levels. And

[1] The prepared statement of Mr. Newsome appears in the Appendix on page 232.

we appreciate the fact that the CFTC announced last week to do just that.

Much has been said recently regarding the role of speculators in energy markets. Speculative activity on U.S.-regulated futures exchanges is managed effectively by position limits. For the NYMEX WTI crude contract, the position limit during the last 3 days of the expiring delivery month is 3,000 contracts. Breaching that position limit can result in disciplinary action being taken by the exchange.

Many believe that speculators, particularly index funds and other large institutional investors in our markets, are responsible for the high price of crude oil. Data from NYMEX confirms non-commercials are relatively balanced between long and short open positions for NYMEX crude oil futures. Thus, non-commercials are simply not providing disproportionate pressure on either the buy side or the sell side of the crude oil market. In fact, since October 2007, swaps dealers in the NYMEX crude oil markets had been holding overall net short positions. Thus, any price impact attributable to swaps dealers would be to lower prices, not to raise them.

Questions are being raised as to whether hedge exemptions for swap dealers are being used by index funds and other institutional investors as a means of circumventing speculative position limits. The full extent of participation by swaps dealers as well as what, if any, influence they are having on current market prices and volatility cannot be determined without accurate data. NYMEX believes that more precise data are needed to better assess the amount and impact of this type of trading, and NYMEX fully supports the further delineation of this data in the CFTC large trader report.

In addition, we continue to believe that market fundamentals are the most important factor in the current market. Uncertainty in this jittery, very tight global crude market regarding geopolitical uncertainty, refinery and deepwater well sabotage and shutdowns, decreasing production by non-OPEC producers and increasing global demand, as well as devaluation of the U.S. dollar, are clearly having an impact on the assessment of market fundamentals.

In futures markets, margins function as financial performance bonds and are used to manage financial risk and to ensure financial integrity, not to control volume flow. Adjusting margin levels significantly upward will not change the underlying market fundamentals, but instead will force trading volume away from the regulated and transparent U.S. exchanges into less regulated or even unregulated opaque markets.

A number of legislative initiatives have been proposed that are intended to respond to perceived problems of excessive speculation in the markets. NYMEX reiterates that it is important to collect the data in order to accurately assess the activity and influence of speculative activity before adopting a legislative solution. Futures markets, like NYMEX, are messengers carrying price information from the energy industry to the public. It would be contrary to the public interest to adopt legislation that impairs the important price discovery function of these markets.

Another legislative proposal would prohibit certain institutional investors such as pension funds from investing in agricultural and energy commodities on U.S. futures exchanges, foreign exchanges,

or over-the-counter markets. NYMEX believes that prohibiting investment opportunities of institutional market participants effectively substitutes the judgment of Congress for the judgment of trained financial investment professionals. Moreover, we believe that the case has not yet been made to support a finding that institutional investors are contributing to the high price of crude oil. It would be premature to adopt a legislative solution for an unproven and unsubstantiated problem.

Mr. Chairman, while we may not be in agreement on all the issues before this Committee, we are in complete agreement that there is a need for full transparency in a competitive marketplace, and we are also firm believers that position limits should be used across the marketplace in order to control speculative activity.

Chairman LIEBERMAN. Thanks, Mr. Newsome.

Incidentally, Senator Collins and I invited witnesses who we assumed would be against some of the proposals because we want to air them out as we have a sense of urgency about actually introducing these as legislation sometime after the recess for the 4th of July next week. So this is really your opportunity, positively or negatively, to influence what we want to do.

Our next witness is Michael Masters, here for his second command performance before this Committee. Mr. Masters is an accomplished hedge fund founder and manager who has researched the effect of speculators, particularly those operating in over-the-counter markets outside the scope of the CFTC's jurisdiction. And I will just say that I did not know Mr. Masters before we asked him to testify. I have a friend who sent me an e-mail and said, "I met this guy Masters, Michael Masters, and he is smart. He understands financial markets, and he really feels strongly that speculation in the commodity markets is a big part of the reason for the increase in the price of fuel and food. You ought to meet him." That is how it started, and I appreciate what you have brought forth, and we look forward to your testimony now.

Mr. Masters, go ahead.

TESTIMONY OF MICHAEL W. MASTERS,[1] MANAGING MEMBER AND PORTFOLIO MANAGER, MASTERS CAPITAL MANAGEMENT, LLC

Mr. MASTERS. Thank you, Senator. Thank you, Chairman Lieberman, Ranking Member Collins, and Members of this Committee, distinguished guests, for the opportunity to testify today. I especially want to thank the two of you for your exemplary bipartisan leadership on this issue. I very much appreciate your balanced approach of taking the time to thoroughly understand these issues and then acting in a decisive manner to solve them.

Commodities futures exist solely for the benefit of bona fide physical hedgers, not for speculators. The futures markets provide physical hedgers with two vital functions: Price discovery and risk hedging. If we lose one or both of these vital functions, then physical hedgers will abandon the futures markets, and they will become little more than high-stakes casinos. In my written testimony, I discuss at length the mechanics of the price discovery function

[1] The prepared statement of Mr. Masters appears in the Appendix on page 246.

and the threat that excessive speculation poses to the commodity futures markets.

Turning now to solutions, the time for studies is well past. Studies should be attempted prior to the adoption of new financial techniques, like the FDA does with new medicines, not after approval has been granted. "First, do no harm," part of the Hippocratic Oath, is a concept that market regulators should take to heart.

I have read the discussion drafts introduced by Senators Lieberman and Collins on June 18, and I believe they represent a substantial step in the right direction. I note that your three proposed pieces of legislation correspond generally to the first three steps that I am outlining here today. To the extent that they differ, please accept these differences as my suggestions on how to improve on these proposals.

As a first step, I recommend that Congress convene a panel composed exclusively of physical commodity producers and consumers for every commodity. This panel will set reasonable speculative position limits in the spot month as well as in all other individual months, and as an aggregate across all months. For commodities such as crude oil where real limits, except for the last 3 days in an expiring contract have been replaced by accountability limits, effective real limits must be re-established.

The commodities futures markets exist solely for the benefit of bona fide physical hedgers, so they are best qualified to set the limits. These physical market participants understand the benefits of liquidity and will do nothing to jeopardize their ability to hedge. The key here is that reasonable speculative limits allow the commodities futures markets to function properly.

As part of this first step, speculative position limits must apply to every market participant whether they access the futures markets directly or trade in the over-the-counter markets through swaps and other derivatives. This means effectively closing the swaps loophole and ensuring that position limits look through the swap transaction to the ultimate counterparty. It is essential that swaps dealers report all their positions to the CFTC so that positions can be aggregated at the control entity level for purposes of applying position limits.

It potentially makes sense to require that all over-the-counter transactions clear through the appropriate futures exchange. This makes monitoring and enforcement of limits much easier and would have the added benefit of strengthening the current system and making it more transparent.

As a second step, Congress should instruct the same panel to define numerically exactly what constitutes excessive speculation based on a percentage of open interest. As an example, physical crude oil producers and consumers may decide that the crude oil futures markets should never be more than 35 percent speculative on a percentage of open interest basis.

Next, the CFTC should be instructed to establish circuit breakers that adjust individual speculative position limits downward in order to prevent any commodity futures markets from reaching the overall limit established by the panel. These adjustments to individual limits should happen in a gradual fashion to minimize the impact on markets.

The third step is to eliminate the practice of investing through passive commodity index replication. Because of the nature of passive indexing, index speculators have no sensitivity to supply and demand in the individual commodities. The practice should be prohibited because of the damage that it does to the price discovery function. Congress should use any and all available means to do so. One potential avenue may be ERISA. Another avenue may be found in the Commodities Exchange Act which states, "two or more persons acting pursuant to an expressed or implied agreement or understanding" should be subject to the speculative position limits of a single person. Since index speculators are all acting in express agreement by following the exact same index trading methodology, they should all be collectively subject to the speculative position limits of a single speculator. The CFTC could enforce this law tomorrow, and if they did, the amount of money allocated to index replication strategies would have to drop from roughly $260 billion to approximately $4 billion.

Finally, Congress should actively investigate the practice of investors buying physical commodity inventories. It has come to my attention that some Wall Street banks are offering commodity swaps based on actual physical commodities. This is a distressing development because it means that investors are directly competing with American corporations and American consumers for limited natural resources.

Before I conclude, let me say that many of the people who are profiting from the practices outlined in my testimony will try to scare you into believing that futures trading in U.S. commodities will simply move offshore. This is an empty threat. The United States is the largest consumer of energy in the world and the largest producer of food in the world. U.S. corporations and their non-U.S. trading partners are going to prefer U.S.-regulated contracts with physical delivery points inside the United States. Today, without the critical mass of volume that the United States provides, it is very unlikely that any of the existing U.S. contracts would be able to successfully migrate overseas.

The implementation of the solutions outlined in this testimony will greatly increase the confidence of market participants around the world that our futures contracts' are an accurate reflection of true supply and demand fundamentals. This will lead to greater participation and, ultimately, further volume.

This concludes my testimony.

Chairman LIEBERMAN. Thanks again, Mr. Masters. Very helpful.

Next is William F. Quinn, Chairman of American Beacon Advisors, which manages approximately $60 billion in pension assets and short-term cash assets on behalf of American Airlines and others. Previously, he served as President of Beacon Advisors since its founding in 1986.

Mr. Quinn, thanks for being here and bringing your unique perspective to this important question.

TESTIMONY OF WILLIAM F. QUINN,[1] CHAIRMAN, COMMITTEE ON INVESTMENT OF EMPLOYEE BENEFIT ASSETS

Mr. QUINN. Thank you, Mr. Chairman, Ranking Member Collins, and other Members of the Committee. I am here today as the chairman of the Committee on Investment of Employee Benefits Assets (CIEBA), and I thank you for providing us an opportunity to testify. We have submitted written testimony for the record, but in the interest of time, I will summarize the key points of that testimony.

Chairman LIEBERMAN. Mr. Quinn, excuse me. Why don't you just indicate—I failed to do it—what CIEBA is.

Mr. QUINN. Yes. The Committee on Investment of Employee Benefit Assets is the voice of the Association for Financial Professionals on employee benefit plan asset management and investment issues for ERISA-governed plans. As the chief investment officers of most of the country's largest corporate pension plans, CIEBA members manage more than $1.5 trillion of defined benefit and defined contribution plan assets on behalf of 17 million plan participants and beneficiaries. According to Federal Reserve data, the $966 million managed by CIEBA members in defined benefit plans represents 50 percent of all private defined benefit plan assets.

The pension system has served millions of Americans for over half a century. We owe it to working Americans and their families to ensure that any contemplated policy changes, no matter how well intentioned, do not undermine retirement security.

The record prices for food and energy in the United States and abroad are of great concern to all of us. We are sensitive to the need to investigate this critical problem. We need to understand the supply-demand imbalances, concerns over supply, the impact of the weaker dollar, and the impact of speculative investors. Nonetheless, we are deeply concerned about the prospect of any legislation that would bar pension plans from investing in certain types of assets.

Congress has long recognized that direct government regulation of pension plan investments is ill-conceived. ERISA, the primary law that regulates the investment of pension assets, takes a very different track. Rather than requiring or prohibiting specific investments, ERISA imposes rigorous fiduciary responsibilities on the persons that manage pension plan assets. These rules require a plan's fiduciary to act prudently and to diversify plan investments so as to minimize the risk of large losses. In addition, ERISA requires that a fiduciary act solely in the interest of plan participants and beneficiaries and for the exclusive purpose of providing benefits to plan participants.

Today, private pension plans invest in a wide range of different asset classes, equities, fixed income, emerging markets, real estate, private equity, and natural resources. Plan fiduciaries use a variety of investment techniques and tools, including derivative instruments, to mitigate risk and enhance returns.

Other countries have taken different approaches to the investment of pension plan assets. Historically, some U.S. public funds

[1] The prepared statement of Mr. Quinn appears in the Appendix on page 264.

and some European defined benefit plans had rigid investment guidelines, prohibiting certain types of investments while requiring others. Many of these rigid investment rules were eventually discarded because of the negative impact such guidelines had on investment returns and thus on employees' retirement security. Put simply, mechanical approaches do not work as well as the American approach of investment flexibility paired with strict fiduciary responsibilities.

It is critical that pension plans have the ability to invest in accordance with modern portfolio theory and pursue the best investment strategies available. The investment marketplace is constantly changing, and pension plans need to adapt and evolve accordingly without having to comply with a list of permitted and impermissible investments.

Our concern is both with specific restrictions on pension plan investments in commodities but also with the precedent that action will set for allowing the Government to intrude on pension investments. Today, commodities investments are not a significant part of most private sector pension plans. Our preliminary results of three 2007 surveys of CIEBA members shows that less than 1 percent of assets are invested directly in commodities and a similar amount in natural resources. Based on numbers that were given in testimony of commodity indexes of $260 billion, our members' investments represent about 1 percent of that total. So it is a very small amount.

We firmly believe that commodities may be part of a prudent, well-diversified investment portfolio by providing a hedge against inflation and minimizing volatility, but our primary concern is with the principle that the government should not micromanage pension plan investments.

Pension plans are long-term investors, not speculators. The most successful plans do not chase returns; rather, they have disciplined strategies for minimizing risk and enhancing returns so that the plan sponsor can fulfill the promises they make to their employees. In fact, most plans will rebalance their investments periodically to assure they stay within their guidelines and not inadvertently get overexposed to a single asset class. Thus, we sell when prices are high and buy when they are low.

Political temptation to intervene in pension fund investments is not unprecedented. Congress in the past has considered legislation that would bar plans from investing in particular investments or, conversely, would mandate particular investments. There are numerous instances where there has been a first instinct to require pension plans to make investment decisions with a view of promoting a particularly social or political goal.

Congress, however, has consistently rejected legislation that would subjugate the retirement security of millions of Americans and their families to other social or political concerns, no matter how worthy. In fact, when asked about the economically targeted investments, the Department of Labor interpretation said that a fiduciary must not subordinate the interests of participants and beneficiaries to unrelated objectives.

Moreover, the case for limiting pension investments in commodities has simply not been made. As others, including the U.S. Com-

modity Futures Trading Commission, have testified, it is far from clear that institutional investors in the commodity markets are driving the surge in prices. Before acting, it is imperative that Congress step carefully and allow the CFTC to analyze the commodities markets and gather data.

Regulating pension fund investments would make it difficult to adequately diversify investments to hedge against market volatility and inflation and, consequently, would put at risk the retirement funds of the very workers the proposal is intended to help. In effect, such a proposal would be a case of robbing Peter to pay Paul.

Again, thank you for this opportunity to testify, and please let us know if there is any additional information you would need.

Chairman LIEBERMAN. Thanks, Mr. Quinn.

Our next witness is James J. Angel, Associate Professor of Finance at the McDonough School of Business at Georgetown University. Dr. Angel's area of research focuses on the structure of financial markets, including the micro structure of trading, so he is well prepared to assist us in our deliberations today.

Thanks for being here.

TESTIMONY OF JAMES J. ANGEL, PH.D., CFA,[1] ASSOCIATE PROFESSOR OF FINANCE, MCDONOUGH SCHOOL OF BUSINESS, GEORGETOWN UNIVERSITY

Mr. ANGEL. Good morning, Mr. Chairman. It is a great honor to be here. We are in the midst of an economic crisis brought on by high energy and food prices. The potential for economic and social disruption is major, and it is very important that we deal with the problem. And I am pleased that this Committee is looking at several of these proposals.

We can tell a couple of stories about the currently high energy prices now. One story is that we are in the midst of a speculative bubble, that the same forces that brought us the dot-com and housing bubbles have turned on to commodities, and now we see a food, energy, and metal price bubble.

On the other hand, maybe the markets are right. Maybe we have reached a point of peak oil and maybe the markets are telling us that the value of another barrel of oil to our society really is $135 per barrel. Maybe. Maybe not. The point is markets have an incentive sooner or later to get to the right number. But if we are in the midst of a bubble, we have to ask ourselves, is there something in the design of our financial markets or in our Government policies that is making the bubble worse? And what, if anything, should we do about it?

I have been asked to look at the three proposals that have been put forth.

The first two proposals basically extend the authority of the U.S. Commodity Futures Trading Commission into the over-the-counter market. Now, there exist a lot of close substitutes for the regulated contracts that trade on our regulated markets, and I think it makes good common sense to extend CFTC authority into this area because these "substitutes" for the exchange-traded contracts do spill over into the regulated market.

[1] The prepared statement of Mr. Angel appears in the Appendix on page 268.

However, we have to be careful in how we do this because the devil is in the details. Fortunately, I have a lot of respect for the CFTC and their capacities, and if we give them the resources they need, I think they will be able to exercise this new authority in a judicious manner.

The third proposal is to ban institutional investment. Now, I would like to point out that there are some good, legitimate economic reasons why institutions may wish to invest in commodities. Quite simply put, there is a historical tendency that when stocks go up, commodities go down, and when commodities go up, stocks go down. So by putting some commodities into your portfolio, you can smooth out returns. This is very good for the pension plans and other investors who are trying to reduce the volatility for the workers who depend on their pensions. And, indeed, if you use a standard asset allocation model with some plausible assumptions, you can come up with numbers of maybe 3 to 5 percent easily as a reasonable investment in commodities.

Now, however, we need to be careful with the regulation because these are global markets, and the threat of foreign substitutes is real. I have visited over 50 stock and derivative exchanges around the world, and the foreign markets have, as you know, invested heavily in technology. They are looking for new products, and they would just love the opportunity to snare business away from us. So if we do not impose new regulations in a judicious manner, if we do something crude and clumsy, all we will do is reduce the effectiveness of our markets and push the bad activity offshore into places that are less transparent and less easy to regulate. So we need to be very careful in how we do this.

However, let's not get our hopes up. These proposals alone will not fix the problem. Energy markets have always gone from supply to glut with highly volatile prices. This has happened for over a century in the energy markets. And these proposals will not stop a global frenzy in commodity prices. What will bring prices down is a credible action by the United States that signals to the rest of the world that we are serious about transitioning away from imported petroleum. If we can send a message to the rest of the world that we are going to move away from insecure polluting fuels and become energy independent, then the producers of oil will have a going-out-of-business sale and the prices will drop. However, we have to adopt credible energy policies that demonstrate to the rest of the world we are serious about moving away from petroleum.

Those are my basic comments. I have more technical comments about the proposals in my prepared statement, and with that, once again I would like to thank you for asking me to testify today.

Chairman LIEBERMAN. Thanks very much, Dr. Angel. I will state for the record that the prepared statements of all the witnesses will be printed in the record as if they were read in full. And thanks to you for using a minute and 37 seconds less than you were allotted.

Our final witness is Michael Greenberger, Professor of Law at the University of Maryland, who was Principal Deputy Associate Attorney General at the Justice Department during the Clinton Administration. Before that, he was Director of the Division of Trad-

ing and Markets at the CFTC, where he was responsible for supervising exchange-traded futures and derivatives.

Thanks for being here, Mr. Greenberger.

STATEMENT OF MICHAEL GREENBERGER,[1] PROFESSOR, SCHOOL OF LAW, UNIVERSITY OF MARYLAND

Mr. GREENBERGER. Thank you very much, Chairman Lieberman.

This is a market that I study a lot, and I think there have been three seminal events that have taught me an awful lot about it. Two of those events were the reports issued from the Senate Permanent Investigations Subcommittee, one in June 2006 when Senator Coleman was Chairman and Senator Levin was Ranking Member, and then one in June 2007 when the positions were reversed. I said at the time when I testified on the June 2007 report that if you want to understand these markets, you must read that report.

The third was the hearing Chairman Lieberman held on May 20, 2008, which I think has become a turning point in convincing people that speculation in these markets is a problem and that we need to address it. I will tell you I thought I knew a lot about these markets, but Mr. Masters' testimony on May 20 educated me and, I think, a lot of people with his analysis of the treatment of commodity index funds.

I would say from the outset—and I mention this in my testimony—I am perfectly prepared to discuss this, and I am not going to assert it as a conclusion, but my view is that agricultural index funds are barred by the Commodity Futures Modernization Act. That statute clearly said we are going to deregulate everything, but not agricultural futures. I do not see how you can have agricultural index funds. There may be an argument that they are swaps, but my reading of that statute—and I am perfectly prepared to have a discussion about it—is swaps can not be agricultural instruments. You can have energy swaps because energy was deregulated by the Enron loophole. And I believe that there are many State Attorneys General and people who can bring private right of actions who are looking at that very question as to whether these agricultural index funds are proper.

Second, there are many legislative proposals, and I want to congratulate you and the Ranking Member for your three options. I want to address the issue about fiduciaries. Before the passage of the Commodity Futures Modernization Act, all energy futures had to be traded on a regulated exchange unless expressly exempt by the CFTC. That meant when an endowment or a pension fund, or anybody else for that matter, traded energy futures, whatever their fiduciary obligations, they had to meet the speculation limits of that exchange. Speculation limits were not a substitute for fiduciary responsibility. Fiduciaries had to satisfy speculation limits. Why is that? As Mr. Masters said, these exchanges are not betting casinos. They were designed for commercial hedgers. The commercial hedgers cannot use these markets anymore. But they were intended for commercial use. Your heating oil dealers cannot use

[1] The prepared statement of Mr. Greenberger appears in the Appendix on page 278.

these exchanges. I am sure they have told you that. They cannot hedge. Exxon cannot hedge anymore on these exchanges.

Now, the reason that endowments or anybody else has speculative limits was to avoid unhinging these commercial exchanges from supply-demand principles. In fact, there has been little discussion about the fact that the Commodity Exchange Act provides CFTC with emergency powers to intervene when the markets do not reflect supply-demand principles to set speculation limits and take other corrective measures.

One of the problems we have is because we have freed up so much of this market from the CFTC's jurisdiction, CFTC cannot protect the entirety of the market meaningfully because they only control NYMEX. My view is that I think there are a lot of important tools that can be used to reregulate excessive speculation. I think speculation limits are probably, if you had to pick one, the most important tool. And I think the beauty of your option, No. 1 is that you do not look to see whether the trading is done on a regulated exchange or on an over-the-counter market or an unregulated index fund. As I understand that legislation, someone who is not a true commercial hedger has an aggregate speculation limit for both regulated and unregulated markets. Speculators can use it any way they want. They can use it all in an index fund. They can use it all in over-the-counter markets. Or they can use it all in NYMEX in the case of energy or the Chicago Board of Trade in the case of food. But just like we have a Federal taxpayer identification number, people who want to speculate in these markets, which are supposed to be principally for commercial use, will have limits across the board.

So your option one does not require people to worry about what is over the counter, what is regulated, what is in London. As I understand it, if you are a U.S. citizen or trading in the United States, you would have an aggregate speculation limit for trading in any and all markets.

Option two has each market impose speculation limits on each contract, as I understand it, setting the amount on each contract that would be open to speculation. And I think that would be a very therapeutic approach, but this is the question you have to ask yourself: Is Goldman Sachs going to create a speculation limit on energy index funds? Those funds have many speculators. So I am worried that when you say a contract market, are the index funds a contract market? Will Goldman Sachs or the CFTC be assigning to Goldman Sachs for their agricultural index funds a speculation limit? If you do, I mean, you are essentially undercutting the very purpose of the index fund markets. Revert back to option one. If everybody wants to use their speculation limits to go with an index fund, great. You then preserve the concept of index funds.

So as I see option one and option two, option one gives the trader an aggregated speculation limit across all markets; option two requires the market to say how much of the market will be speculative. Option three is the absolute flat bar on pension funds in terms of what they can do in the futures markets. Also, if you have over $1 billion in net worth, you cannot invest in an index fund. I am slightly troubled by that. I think that is going to be a very arbitrary thing to impose.

In that vein, I am quite sympathetic to what the endowments are saying. You might have $1 billion and need a certain amount to hedge, and then you have got a market closed off to you. But I think these are all very interesting proposals. They cause me to think very hard. I would look to option one as the way to go. I would also encourage you possibly to require the CFTC, while option one is being taken care of—because everybody agrees we are in an emergency—to use their emergency powers wherever they can on regulated exchange and over-the-counter markets pertaining to energy and food. The principal over-the-counter market here is the ICE, which is all over the United States. The CFTC has jurisdiction over it. The CFTC could go in with its emergency powers and set speculative limits temporarily to deflate the speculation, assuming they agree that there is speculation. Thank you.

Chairman LIEBERMAN. Thanks very much. Very interesting, helpful testimony. I think in light of the wide interest in this subject on the Committee, I am going to ask that we take a recess—Senator Collins and I agree—and ask the witnesses not to go far. We will try to get over to the floor, vote, and come back real quickly. And then we will begin the questioning.

Thank you. The hearing stands in recess.

[Recess.]

Chairman LIEBERMAN. The hearing will reconvene.

We will do a 7-minute round of questions for each of the Senators. I want to thank you again for being here, and I thought the opening panel was very helpful.

Chairman Lukken, as I said before, we specifically want to invite your reaction to these three proposals, or any others you would make legislatively, and I will give you that chance now, unless you do not think we should do anything until, as Mr. Newsome said, there is further study. But we have proposed extending transparency to unregulated commodity markets, essentially by closing the so-called swaps loophole; creating a seamless system of speculative position limits, that apply to all commodity trading; and the third is the restriction on the investments of large institutional investors through index funds.

Do you have an opinion you want to offer us about any or all of those three at this point?

Mr. LUKKEN. Well, I think everybody can agree that there has been a large influx of index money coming into the markets. There is a wide range of what that might be, anywhere from estimates of $140 to $260 billion coming into the markets. So we are trying to get our arms around that, but, unfortunately, this comes through swap dealers, which are not directly bringing this money onto the market. They are offering swap contracts to these participants, netting these instruments, and bringing the residual risks to the market. So for us to understand exactly how much is coming into the market is very difficult. We are reaching beyond the futures markets to get this information, which traditionally we have not done.

And so we are using our "special calls" to get this information. We are trying to unwind what these positions might be in terms of futures contracts. But I can tell you right now that swap dealers as a class are actually "flat the market" or virtually flat the mar-

ket. They have as many positions betting the markets will go down as would benefit from the markets going up. So we are trying to better understand this before we make hard and fast conclusions.

I would say, though, conceptually on your proposals, you have tried to address information needs and position limits where points of entry may come into the market, which is helpful. We have done this with exempt commercial markets, with the farm bill provisions, and recently took steps to do this with foreign boards of trade markets. And we are looking into the swap dealer exemption to see whether we need to do this and position limits into these traders as well.

Chairman LIEBERMAN. Since the law has established speculative position limits per entity, wouldn't you agree that these so-called swaps effectively end-run that limit and, therefore, that they are frustrating the intention of a previous Congress to try to limit the speculative positions of anybody speculating in the commodities markets?

Mr. LUKKEN. Well, this has been a policy of the CFTC to give exemptions to swap dealers since 1991. There was something in our reauthorization of 1986 that Congress urged us strongly, I think was the term, to look at exempting these types of risk management from speculative limits.

Chairman LIEBERMAN. I understand the history here, but isn't it true that the sheer size of the trading and investing through this loophole has grown enormously in recent years? I mean, all the evidence we have seen says that. Doesn't that cry out for some kind of remedy? I am focusing on this first recommendation of ours because to me it just looks like people are seeing their opportunities and taking advantage of them. There is nothing illegal that I can see about it, but it is frustrating what was clearly the intention of Congress.

Mr. LUKKEN. Well, certainly we are looking into it to see what is coming through swap dealers, and I think we are going to find a lot of commercial business. Legitimate hedgers are also coming through swap dealers. So we do not want to punish those people who are looking to manage risk in the markets. But if people are purposely evading speculative limits—if they could have gone directly to the markets and would have hit these limits and they are purposely going through swap dealers, this is something we will have concern about and will take action against.

Chairman LIEBERMAN. Let me ask you for a quick response to questions two and three, that is, the coverage of all the speculative position limits, a kind of aggregative position limit that we would give you the opportunity to set.

Mr. LUKKEN. Well, I think it would be difficult, just talking to staff, of how we would police that. I mean, I understand the intent of trying to find optimal levels of speculation in the market.

Chairman LIEBERMAN. The intent is to try to protect the so-called commercial traders, the physical traders, the farmers, the fuel oil dealers, for whom these markets were created so they are not crowded out as they are now down to about a quarter of the volume on the markets.

Mr. LUKKEN. Well, certainly I understand the intent. For us, I am not sure how we would police that, whether we would force peo-

ple out of the markets every day that exceeded certain limits. So I think it is difficult to determine what the optimal level would be; and, how would you police these without government really putting a footprint on these markets. And so I think this would be difficult.

I think the current authority of allowing position limits and accountability levels has been effective and would probably be a preferable method, in my view.

Chairman LIEBERMAN. Let me ask you a final question, and if I have time, I will ask Mr. Masters something. Do you think there is such a thing as excessive speculation? Because in your testimony you focus on the power of the CFTC to deal with manipulation, but we are not really alleging that here. We are saying that speculation has become so dominant in the markets that it is having an artificial effect that is disastrous and raising consumer prices. So is there such a thing as excessive speculation?

Mr. LUKKEN. I think you have put your finger on it. Our mission has primarily been in the past to prevent illegal manipulation. This is a relatively new market structural issue that has developed over the last couple years that we are trying to get our arms around. But I think theoretically, certainly if markets are being artificially driven higher, sure, excessive speculation can lead to that. I am not sure that case has been proven, but it is certainly possible.

Chairman LIEBERMAN. OK. I am glad you acknowledge that. I am surprised at your answer that you are not sure there is excessive speculation.

Let me ask Mr. Masters in the minute I have left, yesterday before the House Energy and Commerce Committee you and two other witnesses—Fadel Gheit, Managing Director and Senior Oil Analyst at Oppenheimer and Company, and Edward Krapels, a special adviser at the consultant Energy Security Analysis—all said that if greater regulation over the speculation in energy prices actually was adopted by Congress, implemented by the CFTC, there would be significant drops in crude oil prices, and the retail price of gasoline that is now obviously over $4 a gallon would follow suit. You indicated, "prices would probably drop over a reasonably short period of time, back to somewhere closer to the marginal production cost of oil, $65 to $70, as compared to the $130-plus now. And I think gas prices would reflect that in a relatively short order."

Mr. Gheit said prices could come down to a range of $45 to $60 a barrel, and Mr. Krapels said, "I don't think it would take 30 days after the President signed such a bill. It would happen more quickly than that. As soon as Congress passed it, commodity funds would withdraw their positions."

Now, of course, that sounds great to not only us but people who are suffering the consequences of the unbelievable, unprecedented run-up in prices. Why do you assert that with confidence, Mr. Masters, that there would be that significant a drop in retail prices if we regulated the speculative behavior in the commodity markets?

Mr. MASTERS. Thank you, Senator. I was referring, when I was testifying yesterday, to implementing the solutions that I described. If you take away one thing from the testimony today, I would take away the following suggestion, and that is, money

moves prices, money moves markets. And so if you want to understand why markets are moving, follow the money.

The key here is that there is no question that institutional investors in the capital markets have infiltrated the commodity futures markets through long-only strategies to the tune of new inflows of almost $170 billion, as of my testimony May 20, when I testified about the $260 billion, that also included some price participation. But, effectively, those new inflows of actual dollars have impacted the price, especially when you think about the fact that in 2003, the total open interest of all commodity futures was $180 billion.

So you have had approximately the same amount of money that has come into the commodity futures markets than you had total open interest in 2003. So we are not arguing that index speculators are the only reason that prices have gone up, but we are suggesting that they have greatly amplified a positive price trend, and they have contributed to greatly higher prices. And so what you have got here is supply and demand, and also financial investor demand. So it makes a lot of sense to us if you take away that financial demand that you are going to bring down prices because you are going to bring down total demand. And that is why we made the statement we did yesterday.

Chairman LIEBERMAN. Thank you very much. I am over my time. Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

Mr. Newsome, you indicated that the development of an overseas look-alike to the NYMEX West Texas Intermediate Crude Oil contract had made about a third of that market non-transparent to the CFTC and "permitted an easy avenue to circumvent position limits designed to prevent excessive speculation."

Two questions for you. First, do you think that the changes that the CFTC recently announced addressed that problem adequately of the lack of transparency? And, second, do you believe that excessive speculation did, in fact, occur because of the lack of transparency in those markets?

Mr. NEWSOME. Senator, the answer to the first question is yes, we do believe that the actions the CFTC has taken adequately address our concerns. At the same time, we are certainly not opposed to the Congress codifying those actions.

Second, with regard to whether or not that activity did lead to price increases through speculation, I do not know the answer to that, and that is why we wanted those markets made transparent so those positions could be seen and that determination made.

Senator COLLINS. Professor Greenberger, some experts have estimated that excessive speculation in the futures market has driven up the price of oil by as much as a third. Do you have an estimate of what you think the impact has been?

Mr. GREENBERGER. Well, I do have an estimate, but I am not an economist, and I was a regulator. In my bones, I know that these things are happening in the ICE, which you have referred to, is overseas, and I believe in the U.S. exchange. They have all their indicia in the United States, and I think we make a terrible mistake to keep calling it a British exchange when it is run in Atlanta, has trading engines in Chicago, and 30 percent of the competitive contract that NYMEX has. So in my bones I know not only there

is excessive speculation—and I know you said you are not addressing manipulation. But I can tell you even in the regulated markets, we worry about manipulation.

I would guess that is 25 to 50 percent, but the people I would look to are the people who testified in the first panel in the House yesterday who are mostly trained economists or experts in these oil markets. And if I remember, the thesis there is at a minimum it would go back down to $80 a barrel. That is what OPEC estimates it should be at. It is $135 now. Saudi just announced they are going to put more in. Oil went up yesterday.

Senator COLLINS. Thank you.

Just so I am clear, I can assure you that we are all concerned about price manipulation as well as excessive speculation. One thing that I would hope that everyone ought to be able to agree on is that there should be transparency on all the markets. I agree with you that if anyone is going to have access through our commodities and our markets, the same rules should apply that should be effective and even oversight by the Commission.

Mr. Lukken, I want to ask you about the thesis that Mr. Masters has put forth that speculators are creating a virtual demand for the product that drives up prices. I was struck in looking at Mr. Masters' testimony by a table that he has that has a 1998 versus 2008 comparison of speculative long positions in heating oil, and the chart shows that index speculators held only 10 percent of those positions back in 1998, but today hold 47 percent.[1]

What is your reaction to that data?

Mr. LUKKEN. Well, I am not sure how Mr. Masters got the information on the energy markets because we currently do not report that, and that is why we are trying to get better data from the swap dealers on how much of that money is flowing in. We certainly get it for agricultural markets—we have very good data on index traders. Where we see large positions, large index trading flowing into certain commodities, where some of the highest levels—in fact, cattle and hogs have some of the highest levels of index participation, and they have some of the weakest prices currently in commodities. There are other markets in wheat, Minneapolis wheat, that have no index money at all, but some of the highest run-ups in prices.

So certainly we are trying to find the causations that you are after, that Mr. Masters is trying to find, and we are looking to do that. We are trying to get better data on the energy commodities in order to make those determinations. But currently it is difficult to find a smoking gun saying that index trading is leading to higher prices across the board because we certainly have instances where that has not been the case. And, in fact, we have been tracking this very closely on agricultural products over the last 3 months. We are seeing a slight decrease in index funds coming into those markets over the last 3 months during this price run-up in a lot of other agricultural commodities.

So, again, we are looking for the smoking gun. We are going to get better data on the energy side and hopefully can give hard, fast conclusions.

---

[1] The chart referenced by Senator Collins appears in the Appendix on page 256.

Senator COLLINS. Mr. Masters, could you tell us the derivation of your data for that chart where you show the holdings of the index speculators going from 10 percent 10 years ago to 47 percent today?[1]

Mr. MASTERS. Sure. I will answer that, Senator, and just before I answer it, if you will indulge me, I will just respond to Mr. Lukken's suggestions.

One of the reasons why lean hogs and a couple of other commodities in the indexes have not moved due to the effects of index speculators is their settlement procedures are much different. So I think in actuality he is making our point for us here.

Lean hogs are cash-settled based on a nationwide index of spot prices, and so the effect of index speculators is greatly muted by having this particular settlement procedure because it brings prices back down to an actual fundamental spot index.

With regard to the Minneapolis wheat issue, that can be explained pretty easily by something that economists call the cross-elasticity of demand or the substitution effect, in which prices of one commodity go up when another commodity that is a close substitute goes up. So, for instance, to use a car example, if I wanted to buy a Ford and the price went up too much, maybe I would buy a Chevy instead. And so that is the basic tenet.

But to answer your question, we derive our numbers directly from the CFTC Commodity Index Traders Reports. We then extrapolated out our numbers for energy because they are not currently provided. But the math is relatively easy. For instance, if wheat is 2 percent of the index and you know the position of wheat is $2 billion, then you can just do the math and figure out that if it is 2 percent of the index and that is $2 billion, then 100 percent of the index is $100 billion. And since these index replicators are all doing something exactly specific to the index, if you know that the index in heating oil is 5 percent, say—I am just making that number up—then you can easily figure out that the input into heating oil is $5 billion. So that is effectively the way the numbers work out.

Senator COLLINS. Thank you.

Chairman LIEBERMAN. Thanks. Very interesting. Senator Levin.

OPENING STATEMENT OF SENATOR LEVIN

Senator LEVIN. Thank you, Mr. Chairman. Thanks to the panel.

One of the legislative options that has been discussed is to impose position limits in the over-the-counter market, and I believe, Mr. Masters, you have supported that option. I am interested as to, first of all, what your position is on that, Mr. Newsome. Second, I would like to know how it will work. How do you get to the over-the-counter market as a practical matter?

So, first, Mr. Newsome, do you support that particular recommendation or option?

Mr. NEWSOME. Well, in theory, coming from the regulated exchange component where we have position limits, we would love for all the market participants that we compete with to have position

[1] The chart referenced by Senator Collins appears in the Appendix on page 256.

limits. But I think with the second component, you get to the heart of it. I have no idea how you would do it and make it work.

Senator LEVIN. All right. But you would like, if we could make it work, to get it done.

Mr. NEWSOME. Yes.

Senator LEVIN. Yes. OK. Mr. Masters, as a practical matter, it seems to me there are a lot of pluses in this. There is no doubt in my mind—and we have put out this material before in our Permanent Subcommittee on Investigations as showing the 1,200-percent increase in the number of crude oil futures contracts held by speculators over the last 5 or 6 years, whereas the number of crude oil futures contracts held by commercial traders have only gone up 200 percent. There is not much doubt in my mind that speculation has played a critical role, and in our earlier report at the Permanent Subcommittee on Investigations, we showed that when oil was $70 a barrel, we estimated that $20 of that $70 was from speculation at that time, which is about 30 percent of that barrel's cost.

So, in my mind, there is very little doubt that speculation has a significant role in the drive of the price increases of oil. But if we want to close some of these other loopholes—we think we closed the Enron loophole, and I want to ask you, Mr. Lukken, as to whether we did that effectively. But to get to the other "loopholes," including the over-the-counter problem and including the London problem, how do we practically get to over-the-counter transactions?

Mr. MASTERS. Well, thank you, Senator. I think the way we are suggesting is that you do this at the control entity level. For instance, you set up position limits so that a particular participant, even though they may trade under five different names or five different corporations or whatever, that all goes back to the one source. So that is the first thing.

Senator LEVIN. But what if it is not on an exchange, if it is just literally a telephone conversation between two people?

Mr. MASTERS. Well, effectively, if they are U.S. citizens, the CFTC is going to have jurisdiction over them.

Senator LEVIN. So they have an obligation of notifying the CFTC——

Mr. MASTERS. So they have to report——

Senator LEVIN [continuing]. Even it they do not use the exchange, the burden would be on them by law to notify somebody that they have had this over-the-counter one-on-one transaction.

Mr. MASTERS. That is my understanding.

Senator LEVIN. Do you think that is a practical way to put a position limit on these over-the-counter trades?

Mr. MASTERS. We actually do that in a lot of areas. We certainly do that—if you are a U.S. citizen—I mean, it comes back to a lot of money-laundering regulations. But effectively you can figure out if they are U.S. citizens, you can make sure that they have to comply with laws where there are over-the-counter swaps and whatnot.

Senator LEVIN. Now, if there is not an exchange involved, how do you set the position? Would that be by law, the position limit?

Mr. MASTERS. The way we suggested to set the position limits is to convene a panel of physical players only, exclusively physical players. So, for instance, in crude oil that would be, for instance,

the airlines, perhaps Exxon, or some of the refiners. Those are just physical players.

Senator LEVIN. All right. They would make a recommendation. Would that be incorporated by law or would that be the law?

Mr. MASTERS. That would be—I think you could do either one, but I think the point of the matter is they are the best qualified to determine what those position limits are because they are never going to sabotage their ability to transact in those markets. They want sufficient liquidity, that they need to be able to transact. But they do not need so much liquidity that they cannot transact.

Senator LEVIN. And would that be a recommendation to a regulator to then adopt that position limit?

Mr. MASTERS. I think you certainly could do that.

Senator LEVIN. I do not think you could delegate that to a private group, that decision, could you?

Mr. MASTERS. I think you could delegate it to a private group and then have the regulator, follow the——

Senator LEVIN. Adopt it.

Mr. MASTERS. Adopt it.

Senator LEVIN. Or not.

Mr. MASTERS. Right. Again, the reason for that is you have the exchanges which are paid on a per contract basis, and you have investment banks that also have an incentive to see more transactions. So really you have some conflicts of interest there you need to address.

Senator LEVIN. All right. Now, you have indicated, Mr. Masters, in your testimony that if you follow the money, you can see how the demand has increased the ultimate price for oil. And here, Mr. Newsome, I want to ask you a question. Even though you have not concluded yet that this is accurate, you are not sure in the chicken-egg problem, which is the chicken, which is the egg. Would you not agree that the demand—put aside the ultimate product, oil, but the demand for futures contracts, if it has a huge increase, that the increased demand for the contracts would drive up the price of the future contract? Would you at least go with me that far—before I trap you? [Laughter.]

Mr. NEWSOME. And I know you are very good at that.

If it was increased demand from commercial participants who had the ability to trade through expiration when the price is determined, then they would have the ability, and that is how a market works.

Senator LEVIN. No, try the non-commercial participants. If you really believe that supply and demand works, if suddenly you have a huge influx of money for the contracts—put aside the product. The contracts. Wouldn't that under the normal rules of supply and demand drive up the price for the contract?

Mr. NEWSOME. Yes, it certainly could be the case.

Senator LEVIN. If that is true, then the question is: What is the relationship between the price in the contract and the price for the ultimate product? That then becomes the question. And if the price for that contract, the delivery of that oil, say a week before it is supposed to be delivered is $130 a barrel, would you not then take the second step with me then that clearly would have a price on

the actual product itself? Do not do the 3 months out and 4 months out. Just do the week out or 2 weeks out.

Mr. NEWSOME. Well, the WTI contract at NYMEX works very efficiently, and you can determine that by the fact that the prices do converge. The futures price and the cash price converge into one price at the end. But at the end, you have no speculative interest trading. You only have the commercial entities that are trading on both sides.

Senator LEVIN. But if there is that relationship—and I think logically there is. If you are a week out or 2 weeks out and something is $130 a barrel, they are going to converge. They are not going to go down to $70 in a week. If that futures price has an impact on the price of the commodity a week later or a month later, then if you believe that supply and demand rules generally work, it seems to me it takes two steps, but you get to the point where the demand for futures contracts has driven up the price of the futures contracts, which I think is clear under rules of supply and demand, and then that price has an effect on the product itself, particularly when they are fairly close a week out or 2 weeks out before delivery.

Would you agree?

Mr. NEWSOME. No, the key price discovery is the spot contract at which the price converges. Certainly they will trade in the outer months, but the prices of those outer months have virtually no impact on the price of the spot market.

Senator LEVIN. But the week before or the 2 weeks before, would you say that does have an effect?

Mr. NEWSOME. It converges in the last 3 days.

Senator LEVIN. I am over my time. Could I ask a quick question of Mr. Lukken? Have we effectively closed the Enron loophole, in your judgment?

Mr. LUKKEN. Absolutely.

Senator LEVIN. Thank you. Thank you, Mr. Chairman.

Chairman LIEBERMAN. Thanks, Senator Levin.

We have the leadership of the Permanent Subcommittee which led the way for this Committee into the investigation, which really has produced results. As the last answer said, we have absolutely closed the Enron loophole. Senator Coleman.

OPENING STATEMENT OF SENATOR COLEMAN

Senator COLEMAN. Thank you, Mr. Chairman, and I compliment my Subcommittee Chairman that he has been focused on this, and I have been focused on it. But a couple of things still hang out there. You have smart people on all sides of this.

Mr. Angel, you made it very clear. You said that the threat of a foreign substitute is real, that if, in fact, we regulate in a certain way, that we require certain margin requirements, etc., that, in effect, we can drive this trading somewhere else. And yet it seems to me that if you have American citizens and American operations involved here and they want to trade or do things in this country, we should have the ability, regardless of the market they are trading on, to require some kind of transparency. Is that a fair assessment?

Mr. ANGEL. Yes, I am a big proponent of transparency in the markets, and I think that giving the CFTC the authority to investigate and regulate, where appropriate, the over-the-counter markets makes sense. I think the CFTC has shown that they can regulate intelligently most of the time and that they would not go so overboard as to drive the business offshore.

Senator COLEMAN. Professor Greenberger, how real from your perspective is the sense that if we push too far, we are really going to be driving folks offshore to less transparent markets?

Mr. GREENBERGER. I do not believe that is the case. I would urge you to look at the C–SPAN proceedings yesterday where virtually every independent observer and academic observer said that would not happen. The reason it will not happen is basically the West Texas Intermediate market is in the United States. We have NYMEX, and we have ICE. Now, ICE flies the Union Jack, but they are in Atlanta; they have Chicago trading engines and 30 percent of our market. That is the United States.

When I was at the CFTC, I was besieged by all of these foreign exchanges wanting terminals in the United States. Mr. Lukken, if I remember correctly, said yesterday, 20 foreign exchanges have United States terminals. They cannot build liquidity, certainly in U.S.-delivered products, without having a presence in the United States.

Yesterday, the experts testified that the real threat in oil is London, but on the U.S. West Texas Intermediate, it is delivered in the United States. It is an economic reality that the hedgers and the speculators want to be in the country where the delivery is taking place.

Dubai Gold has started a West Texas Intermediate and is not asking to come into the United States. My understanding is that the contract is not doing well. Dubai Metal has gotten permission to come into the United States. The *Guardian* just ran a story. They have not started yet. It is not doing well. If they get terminals here, which they have permission to do, and trade WTI—which, by the way, will be regulated by Dubai—they will probably be able to pick up liquidity. You have to be here, and, frankly, I think it is a hard thing to tell your constituents that we are not going to provide relief because we are worried that speculators will go elsewhere. And if you are going to weigh out those balances, you have the speculation that it will go elsewhere against the reality of $4 gas and $135 oil.

Senator COLEMAN. Mr. Newsome, do you want to respond? Just listening to the exchange with Senator Levin, and Mr. Masters' comment about following the money, money moves markets, follow the money, on the non-physical side, the pension funds and others, looking at the testimony, there is discussion that the speculators are buying long, but some are buying short. And so I am trying to understand. Is it the volume of the money that, in effect, drives it? But if some of that money is betting short, does that somehow change the conclusion that this massive influx of money is contributing directly to higher prices?

Mr. NEWSOME. Well, I think we are having somewhat of an apples-oranges discussion when we are talking about these markets. With regard to the NYMEX markets, the positions of swaps dealers

since October 2007 have been net short, putting downward pressure on prices.

Now, the scenario that Mr. Masters is talking about with the long-only funds, they are buying those funds, and the swaps dealers, the banks, are laying off that risk. But the banks themselves, at the CFTC hearing 2 weeks ago, admitted that they were laying off 90 percent of that risk over the counter. That is not coming to NYMEX. That is not reflected in the NYMEX numbers. And so I think when you say that it is having this long-only effect on the futures market, it is impossible to have that effect because you have to trade out of that position every months before you can buy the next.

Now, if you will allow me to go back to Mr. Greenberger's comments—and Michael and I have known each other for a long time—I respectfully disagree with his comment about driving these markets offshore because it has already happened. London has 30 percent of the WTI market today. London has 50 percent of the Henry-Hub natural gas market today. The over-the-counter markets are nine times larger than the NYMEX market today. Not only can it happen, it is happening.

Senator COLEMAN. Mr. Masters, just to follow up then on Mr. Newsome's comments, if, in fact, that $170 billion, whatever it is, if it is being laid off short, where is the upward pressure?

Mr. MASTERS. Thank you, Senator. This is something that is thrown around by folks. People say, well, you see, there is a buyer for every seller, and so the implication is that prices will not move. Let's understand something clearly. There has been a buyer for every seller for every transaction ever in history. When Yahoo! traded at $120 in 2000, there was a buyer for every seller. When it traded in 2001, 1 year later, it traded below $10. At that point there was a buyer for every seller. So having a buyer for every seller does not mean transactions do not occur and markets do not move. Otherwise, markets would never move.

So to what he is saying, the answer is the swaps that the index speculators are buying, the dealers may be selling, but it does not mean it is not going to have any effect on price. Because if you had a neighborhood and five people decided to try to buy your house, you are not going to keep the price the same. You are going to move up your price. And that is the way things work.

If there is not enough supply at a certain price, the price goes higher. And that is what has happened here. The swaps dealers are just trying to lay off their risk. What they do is an index speculator comes in to them, the index speculator buys, the dealer sells, and then they turn around and buy a later contract, especially in a market with backwardation because they can make that spread. So there is still an impact. But the idea that just having a buyer for every seller means that prices do not move is, quite frankly, ridiculous.

Senator COLEMAN. If I may, Mr. Masters, I think you are the only trader sitting up here. You are active in the market. What are you telling your clients? Are you buying short or are you buying long today?

Mr. MASTERS. I do not trade commodity futures. I am a long-short equity manager, and we have a variety of positions in equities.

Senator COLEMAN. I mean, where do you see this going?

Mr. MASTERS. In terms of?

Senator COLEMAN. Long, short? I mean, where do you——

Mr. MASTERS. In terms of the price of crude?

Senator COLEMAN. Yes.

Mr. MASTERS. I really think that if you can pass some really good legislation along the lines of our suggestions, that will have the effect of, short term, greatly bringing down prices. The issue here is what we have is an acute problem versus a chronic problem. We have an energy infrastructure issue that we have to deal with long term. But on the acute side, in the very short term, we have something that we can solve through regulation that will restrict institutional investors' ability to impact price discovery in the futures markets. And so there are differing time horizons. But I think over the short term, if you did this, I think that it is very likely that prices for food, energy, and commodities would come down hard.

Senator COLEMAN. Thank you, Mr. Chairman.

Chairman LIEBERMAN. That is encouraging. I thought for a moment there, Senator Coleman, you were asking for a stock tip. [Laughter.]

But this would have been in total compliance with the Securities and Exchange Commission Act because it was totally open. [Laughter.]

No insider trading. Senator McCaskill.

OPENING STATEMENT OF SENATOR MCCASKILL

Senator MCCASKILL. Thank you, Mr. Chairman.

This is a really dangerous time. It is a dangerous time because there are millions of businesses out there that are on the brink of collapse, and there are millions of families out there that are waking up every morning afraid. And what makes it even more dangerous is those of us who run for office feel incredible pressure to do something. And it is with a great deal of trepidation that we should wade into these waters in terms of beginning to play with a very heavy hand in the market.

And I got to tell you, Mr. Masters, I think you speak plainly and you are very easily understood, and you may be the most powerful guy in Washington right now because what you are saying is what we all want to hear. What you are saying is that if you all will just do this, you are going to be able to, short term, move this price. And, frankly, most of the people around Washington right now, that is all they want to hear. What do we do to get the price down?

And, unfortunately, I think that there are many of us who have not grasped some of the unintended consequences that we have to be careful of if we begin doing too much too quickly without really thinking this through. And so it is one of these really scary times to have a vote, because I am not sure what you will be doing a few years from now. I am not sure what oil prices will be doing a few years from now. But all of us will still be answerable to the same people that are going to be very angry if we cannot figure out something to do with oil prices or if we make it worse.

We stopped contributing to the Strategic Petroleum Reserve. Prices continued to go up. We closed the Enron loophole. Prices continued to go up. China announced no more subsidies. That is huge, China announcing no more subsidies, because all the talk has been, well, this is Chinese demand, that is what is doing this. The prices continued to go up. Saudi Arabia said this weekend they are going to produce more. Prices opened up on Monday.

So I am looking at four events that I think if we were in a bubble somewhere and it was not really in the news and I asked all of you smart people wouldn't all of these things have some impact on the price, and clearly they have had no impact on the price. You just said, Mr. Masters, that you believe that if we do these regulatory issues in terms of limiting institutional investors, limiting positions, trying to get back to the commercial players as opposed to the index funds and the hedge funds, you believe it will have a short-term positive impact on the price of crude oil. I want to ask the rest of you, yes or no, do you believe the price of crude oil will go down if we do this? Beginning with the CFTC, yes or no.

Mr. LUKKEN. Not significantly, no.

Senator MCCASKILL. NYMEX?

Mr. NEWSOME. No, and I have a perfect example. The uncertainty that has been created among institutional investors over the hearings the last several weeks have forced liquidity and open interest out of the NYMEX WTI contract. And while that liquidity has been leaving, prices have not gone down.

Senator MCCASKILL. Mr. Quinn.

Mr. QUINN. No. We believe it is more supply-demand imbalance. We also think the falling dollar has had a big impact because our price increases are much greater than we are experiencing in Europe where the dollar has depreciated.

Senator MCCASKILL. Dr. Angel.

Mr. ANGEL. No. These are technical changes to the edges of the market. It really will not break the psychology of the market right now.

Senator MCCASKILL. Mr. Greenberger.

Mr. GREENBERGER. Yes, and I think in 4 years, if you do not do what is being suggested today, you are going to be criticized. Both Presidential candidates are calling for the end of speculation. Senator Obama came out with a very strong plan.

Senator MCCASKILL. Well, we cannot end speculation.

Mr. GREENBERGER. No, I mean——

Senator MCCASKILL. That would be a terrible thing to do because if we end speculation, my farmers are in big trouble, to say nothing of Anheuser Busch and American Airlines that need to buy all kinds of commodities in terms of liquidity.

Mr. GREENBERGER. One of your premises is we closed the Enron loophole. We are still talking about agricultural index funds. Why aren't they closed?

Senator MCCASKILL. That is a good question.

Mr. GREENBERGER. I have the greatest respect for those who worked on closing the Enron loophole, but I have testified it was not fully closed. And I can elaborate on that, but if it is closed, why are we talking about all these pension index funds.

Now, Mr. Newsome said, if you close it, people will run to the ICE because it is British. The ICE is here, in Atlanta. It is headquartered in Atlanta, trading engines in Chicago, trading West Texas Intermediate, delivered in Cushing, Oklahoma, in U.S.-denominated dollars.

Now, Mr. Newsome tells you, the unintended consequences will be that you will drive more to that market. That market is unregulated in the United States. Senator Levin is the principal author of pending legislation to re-regulate those exchanges. So when you say Saudis put more oil in, China has reduced its subsidies. George Soros testified in front of the Senate Commerce Committee. You could empty the Strategic Petroleum Reserve and not affect the price of crude oil unless you get a regulatory handle on what has not been closed by the Enron and London loopholes.

Senator Lieberman and Senator Collins have a suggestion, that is option one, that I think is very credible. The Saudis are playing chicken with us. They know they can announce 12 million barrels in 3 years, and it is not going to have any impact because this has no commercial basis. Saudi Arabia announced this great program to increase oil, and yesterday oil goes up $1.36. They have no control over it.

Senator McCaskill, I cited in my testimony yesterday a 1992 House Agriculture Committee study quoting a wheat farmer in your State, or somewhere thereabouts, saying, "I look out at my field, and I do not own my field because some guy in Chicago is trading paper and taking my price power away from me." That is why we passed the Commodity Exchange Act. In 2000, we deregulated energy, and now we are hearing, even though we did not deregulate agriculture, that there are agricultural index funds.

Of the four premises you have, the one I would go back and look at is if you closed the Enron loophole. That was good, but today there is not one contract that has been affected by that closure. And Mr. Lukken has announced it will affect Henry-Hub. That is natural gas. That has nothing to do with oil, gasoline, or heating oil.

Senator MCCASKILL. I noticed in your written testimony, Dr. Angel, that you talked about three things: Is it a bubble? Is this really the price? Is it being manipulated? And then you talked about your solutions. And I got to tell you that I believe that your solution is the solution. The problem is it is not quick enough. The problem is it does not help me with the literally thousands of phone calls I am getting every day and the letters I am getting every day: Why can't you do something? And, what you said in your written testimony, I am not sure that you had time to emphasize it in your oral testimony, so I will do it for you. It is, in fact, our commitment to alternative energy that is going to, in fact, make the difference. It is, in fact, saying to the oil producers, we do not need you anymore, we do not want you anymore, we can do this differently.

Do you believe that the single most important thing we can do for oil prices in this country is to, in fact, extend the tax credits for solar and wind and to do the kind of investment in these technologies and in this kind of alternative energy, not just ethanol but a whole lot of other things—cellulosic and all of the hydrogen tech-

nology? Do you think that is the single most important thing that we must do?

Mr. ANGEL. Yes. We must adopt credible policies to move away from petroleum, that is, policies that the rest of the world will see and say, yes, we are going to stop burning petroleum, and because of that the stuff we have in the ground is eventually going to be worthless. Once that happens, we can use the strength of the speculators, like a good martial artist, against them. Once the markets see that we are going to stop burning petroleum, then there will be a going-out-of-business sale. The speculators will rush to the exits and start shorting petroleum.

Senator MCCASKILL. All right. I will tell you that the only thing in your testimony—you said we have to make sure that oil does not get below $100 a barrel? I hope we have that problem.

Mr. ANGEL. And we will.

Senator MCCASKILL. Thank you, Mr. Chairman.

Chairman LIEBERMAN. Thank you, Senator McCaskill. Senator Warner, thanks for being here.

OPENING STATEMENT OF SENATOR WARNER

Senator WARNER. Thank you, Mr. Chairman. I thank you and the distinguished Ranking Member for convening this Committee for a very important hearing. And, gentlemen, you were challenged with one of the more extraordinary chapters of my contemporary life here in the Senate of some now 30 years. This is a very volatile issue, and we want to be extremely cautious not to, through testimony or otherwise, elevate the hopes and aspirations of a public that is grievously suffering that there is a quick fix for bringing down gas prices.

I support the measures that my colleague from Missouri talked about. Certainly we can go to the alternatives and so forth. But that is going to take time. I am a sponsor of offshore drilling, and I think maybe there is a chance now that can be done, certainly for natural gas. But that is going to take time. So we are struggling with what we can do now to impact this situation, and I hope that we do so with the greatest of caution.

Now, speaking for myself, I come out of the old school that this Nation, when the Founding Fathers put it together, was predicated on the principles of a free market system, and there is a fairly clear definition of what a "free market system" is. And it served this Nation quite well, except in times of war and other periods when we have had to take extraordinary measures.

So my first question to you is that I am heavily inclined to support the Chairman and Ranking Member on their principles, but I would just like to ask each of you a simple question. If this were to become law, would this alter in any way the concept that we have had these many years about the free market system? And if so, does it strengthen the free market system or change it? So that is the question. We will just go down the line.

Mr. LUKKEN. The devil is in the details of what this legislation——

Senator WARNER. That is a standard answer.

Mr. LUKKEN. This would put controls on free market activity. So it would hinder it. And we already have controls in place in our law

that allows certain limitations on speculative activity. So depending how it is crafted, it could be effective. But we want to make sure that it is not driving business overseas, that the markets are working effectively to discover prices. And that is the key. Are they discovering the right prices? And that is what we would be looking for.

Senator WARNER. So there is a potential that this could be interpreted or written or rewritten in such a way as to really impair the concept of a free market system?

Mr. LUKKEN. It would put controls on free market—the movement of capital, certainly.

Senator WARNER. All right. Mr. Newsome.

Mr. NEWSOME. Free competitive markets operate best and most efficiently when they are completely transparent, and that is the focus of our——

Senator WARNER. Well, that would be my second question when I come around. We may as well incorporate it in this. I really believe in every step that we can take to make things more transparent, or in simple language, let the sunshine and the light come in so that each person that wishes to follow this can see it. So you think it achieves that. And what was your response to the free market system?

Mr. NEWSOME. Well, I think certainly transparency is beneficial to the free market system. Position limits are something that we have in use today to control speculators in the regulated marketplace, and in our opinion, it works very effectively.

Senator WARNER. All right. Mr. Masters.

Mr. MASTERS. Thank you, Senator. I would just say that free markets, just like free society, require rules. In society, we do not allow assault and battery. Nobody argues that makes any of us less free. In this case, having some rules in our markets does not make our markets less free. In fact, I would argue that they actually make them more free.

It is important to note that for bona fide physical hedgers, the actual prime constituency of the commodity futures markets, they presently have no restrictions, no position limits on their activities, and we are not promoting that they should. They will still be completely free without position limits to act as they would like to, and I mean bona fide physical hedgers.

More importantly, speculators in the commodity futures markets, because they are not capital markets—they are commodities futures markets and, therefore, a different purpose—have always had limits, and that served everyone very well, because in this case what we want is we want some speculation——

Senator WARNER. Do you feel that this will strengthen the concept of the free market system?

Senator WARNER. How about transparency? Do you feel it enhances transparency?

Mr. MASTERS. I absolutely do.

Senator WARNER. Good. Thank you. Mr. Quinn.

Mr. QUINN. Three quick points. Transparency, we would be very favorable for. We think it would enhance the free market system. I think putting on specific limits, we would be concerned about how they allocate those limits to legitimate investors, and that would,

therefore, limit the free market principles that you refer to. And certainly proposal three, banning pension funds, would have totally the opposite affect on free markets. It would be taking active investments and decisions out of the free market system.

Senator WARNER. Out of the free market system.

Mr. QUINN. Yes.

Senator WARNER. Thank you. Dr. Angel.

Mr. ANGEL. Markets work well most of the time, but every once in a while they make mistakes. And because of that, we found that with some light regulation, markets work even better. And I think some of the ideas proposed here will help the markets work better. I do not think they are a panacea. They are not going to solve the crisis. But we definitely need better transparency, and we definitely need to understand what is going on in the over-the-counter market.

Senator WARNER. And this, in your judgment, enhances the transparency.

Mr. ANGEL. Yes.

Senator WARNER. Thank you. Mr. Greenberger.

Mr. GREENBERGER. I agree it enhances transparency, and it helps, does not hurt, the free market. Bear in mind as the discussion papers that accompany Senator Lieberman and Senator Collins' legislation makes clear, this is premised on the 1936 Commodity Exchange Act. These speculation limits were imposed because farmers were being killed in what was then essentially an only-agricultural futures market. There were too many speculators, so they put speculation limits. From 1936 to 2000, nearly every energy and food futures contract had speculation limits. The energy futures markets were deregulated in 2000. The speculation limits went away for those deregulated markets. What Senator Collins and Senator Lieberman want to do is return to something that has been done since 1936 and is still done in the regulated exchanges: Limit the participation of speculators.

Option three bars certain trading—let's leave option three to the side. Option one and two limit so that the commercials who need these markets are not overwhelmed by speculators. We will have a better futures market. I am sure you are going to be hearing from your industrial users of energy and your farmers that for them to have a better competitive free market, they need these speculation limits on speculators, not to bar them from the markets, but to bring them under control.

Senator WARNER. All right. Thank you. That concludes my time.

Chairman LIEBERMAN. Thanks very much, Senator Warner. I appreciate the question, and it is a question that Senator Collins and I asked ourselves as well.

My own view of this is—and I will say it very briefly, because I think it has been touched on—that the act adopted in the 1930s did set speculative position limits because the Congress then was worried about speculation creating a problem for the farmers and the fuel oil dealers who the market was created for. And the way we see certainly our first two proposals is as simply updating that reasonable exercise of congressional authority to protect public safety, make sure the markets operate freely because of things that have happened since then, some of which were just referred to by

Mr. Greenberger; but also so much business now occurs in commodity futures off the exchanges in these over-the-counter markets. And then we have this swaps loophole that people have taken advantage of that also is an end run around the speculative position limits.

So I share your admiration for markets, but I personally see these two proposals as essentially an updating and response to real events to try to bring the law up to where the life out there is.

Senator WARNER. We do not want to overregulate what we have got here in this country to the point it is all driven overseas. I mean, the rest of the world is going to sit back, look at our hearing, and say, well, that is fine if they want to do it in America, but we are going to do it our own way over here. We are at risk of seeing that happen.

Chairman LIEBERMAN. Yes, I share that. You know what I think? There has been some testimony on this, and I want to get to Senator Carper. But, interestingly, I think if we take some action here, the foreign markets may follow us. In fact, the G–8, when it met in the last 2 weeks, adopted a resolution calling on each of their individual governments to take a look at regulating more actively in the commodities area because of their specific concern that this is a factor in the run-up in oil prices, which is obviously affecting them all, in some cases not as much as it is affecting us and poorer nations, but it is certainly affecting them. Thank you, sir, for that contribution. Senator Carper.

Senator CARPER. Thank you, Mr. Chairman.

OPENING STATEMENT OF SENATOR CARPER

Senator CARPER. Gentlemen, welcome. I think we may be close to the end. I am not sure. But our caucus luncheon meeting starts in about 5 minutes, and so we will probably be out of your hair by then.

I have been privileged to sit in on a couple of Committee hearings that deal with the issue of speculation, and I think in the Commerce Committee we have had some hearings as well. We discussed in a meeting over in the Capitol this morning legislation, I think, Senator Dorgan is introducing today to deal with this matter. And I think legislation that the House of Representatives might try to pass, I think as many as three pieces of legislation, as early as today.

Are any of you aware of the content of any of the three pieces that the House expects to move? And can you comment on them favorably or not for us at this time?

Mr. GREENBERGER. I was at a meeting last night where that issue was discussed among many of the House members who were concerned, and, I cannot swear to this, but I think there is a view that they need more time to digest what they are going to do, and they may not be moving as quickly as they thought they were moving yesterday afternoon.

But there are different pieces of legislation that are being considered. Again, this idea that there is a London market that we do not have control over, we can debate whether it is London or the United States, and I have strong views about that, but, nevertheless, as Chairman Lieberman is saying, our actions may affect

other countries. Chairman Lukken has just gotten the major exchange, which operates under the Union Jack, I believe wrongly, to agree that they should apply position limits for purposes of "London."

I think Senator Levin and Senator Durbin have similar legislation on the Senate side. There is other legislation that wants to tighten the closure of the Enron loophole in the farm bill in the following way: The farm bill Enron loophole provision now puts the burden on Mr. Lukken to prove that a contract should be regulated. People want to go back to the status quo ante before the Commodity Futures Modernization Act and say every energy futures contract should be regulated the way it was on December 19, 2000, and let those who are regulated prove the need for deregulation. And then I think there are others who are suggesting that they do not believe that this major British exchange, ICE, is, in fact, British. They have 30 percent of our crude oil market. They are not operating under the same rules Mr. Newsome is operating under, even if the adjustments are made, and Mr. Lukken has been trying to do that. So there is legislation pending that says if you have U.S. trading terminals trading U.S.-delivered commodities, you must register as a full U.S.-regulated entity, as Mr. Newsome is. And that legislation would avoid trying to regulate through the foreign countries. So those are the three pieces of legislation.

I think there is a dialogue going on, on one part of that, and that is, whether we continue to principally defer to foreign regulators while ratcheting up our controls over them for these U.S. trading terminals, or whether we deem those U.S. trading terminals to be U.S. terminals and they have to be regulated in the United States.

In other words, these people have come to our country. There are about 20 foreign exchanges here. They have their trading terminals here. The biggest problem right now for energy is the ICE, which is trading 30 percent of Mr. Newsome's market. Mr. Newsome used to trade 100 percent of that market. People are debating whether to regulate ICE by going through the British or to say, no, these people are really in the United States, they should register as a U.S. exchange. And I am sure you will be part of that debate in the Senate.

But those are the three different things that are going on.

Senator CARPER. Good. Thanks very much. Dr. Angel.

Mr. ANGEL. I respectfully disagree with Mr. Greenberger. It is so easy to trade anywhere in the world these days. I can go to any Internet-connected computer right now and trade futures contracts on a variety of exchanges that, for all I know, do not even have terminals in the United States. So the fact that an exchange has a terminal here means that they have at least some degree of oversight from the CFTC. But modern communications make it so easy for anybody to trade anywhere anytime that our ability to regulate the activities of foreign markets is rapidly slipping away. And it is not just London that we need to be concerned about. It is Shanghai, it is Singapore, it is Hong Kong, and it is Dubai. It is many other places on the planet.

Senator CARPER. Let me go back to my original question and look to the others on the panel, and let me modify it just a little bit. In addition to asking for any reflections you have on the legislation

that may or may not move in the House this week, or if you have heard anything about the legislation that Senator Dorgan introduced today, any comments on it one way or the other, I would appreciate hearing that, too. Please, anyone?

Mr. NEWSOME. Senator, I have not heard specifics about what he introduced today. I know the bill that he was on with Senator Levin, Senator Durbin, and others is being discussed by the House Agriculture Committee. And that bill supports the transparency that we have been speaking about, supports the position limits that we have been speaking about, additionally supports further delineation of the swaps dealer information, and we support all those components with regard to that legislation.

Senator CARPER. All right. Thank you. Anyone else? Yes, Mr. Lukken?

Mr. LUKKEN. I have not seen what Senator Dorgan introduced today, but in regards to the Durbin legislation, which he was a part of, that is promoting transparency, trying to codify some of the things the CFTC has been doing about getting more information from foreign boards of trade, which is extremely important, and imposing position limits on foreign boards of trade, that is imperative.

I would respectfully disagree with Mr. Greenberger. We have to recognize that this is a global marketplace. New York Stock Exchange and Euronext have merged, those markets in London, Paris, and New York. And we have to engage foreign regulators to try to harmonize and write standards. This has allowed us to do that, and it has given us a transparent view into those markets to see the markets we would not normally see unless we had this process in place. And that is what we want to do, is bring these into the sunshine.

Senator CARPER. All right. Thank you. Mr. Masters, do you want to add to that?

Mr. MASTERS. Sure. I would respectfully disagree with the Chairman. I do not think the Durbin bill would be that effective. I think it is more of a Swiss cheese bill, if you will. There are too many ways to move around it. I think a much stronger bill is necessary.

I just want to make one other point. One of the issues here, I think, is that people from the capital markets tend to impute their biases on the commodity futures markets. The commodity futures markets have a physical delivery functionality in the United States, and I just want to read what Senator Levin said earlier: Today, any futures contract that cash-settles against a U.S. contract with physical delivery provisions is also automatically subject to CFTC regulation unless specifically exempted. If not exempted, then no person inside the United States may lawfully trade that contract.

So without that exemption granted to ICE, which 60 percent of their volume is U.S. participants, ICE would have never gotten off the ground. So, going back and looking at some of these exemptions, removing some of these exemptions, closing the swaps loophole, could be a great way of making sure that these transactions occur on U.S. shores.

Senator CARPER. All right. Thank you.

I have one more question. I am just going to ask it for the record and just ask you to respond in writing, if you would. But we have

gone through some of the short-term options of correcting the challenge that we face, and it occurs to me that there are some long-term issues here that are not likely to be resolved overnight. I think you would agree with that.

What do we, as Members of the Senate, need to be looking at, not in the short term but over the long term, to help bring about some real and needed changes? So I will be asking that one for the record.[1]

Mr. Chairman, thank you all, and thank you very much.

Chairman LIEBERMAN. Thanks, Senator Carper.

We will do a second round of 5 minutes each for Senator Collins and myself. I cannot resist asking you, Mr. Masters, if you think that the other piece of legislation you referred to is like Swiss cheese, would you say that the proposals Senator Collins and I are making are more like solid New England cheddar? [Laughter.]

You do not have to answer. You can give your answer for the record.

Mr. MASTERS. I think your proposed bill is much better, and it does a lot more to solve the problem.

Chairman LIEBERMAN. Thanks.

Let me go back to a line of questioning that Senator McCaskill raised. Part of why we are focused on speculation in the markets as a source of the run-up in fuel and food prices is because we cannot see any other rational place where it is coming from. So, we know that the demand for oil—and food, but let me focus on oil for now—has risen over the last year, but by a small percentage of the increase in the price of oil futures contracts and in the price of gasoline at the pump. So it does not seem like the normal rules of supply and demand are working.

But I want to come back—because it really perplexes me, and it is just this week. If the normal rules of supply and demand are working, why didn't the announcement by Saudi Arabia that they are going to increase their output of oil daily—what, 700,000 barrels did they say? And then if that is not enough, that they are willing to go up 2 million above where they are now by the end of the year—I mean, that is really the futures market. Why has the price of the barrel of oil continued to rise after the Saudis did that if there were any normal laws of supply and demand going on here? Dr. Angel.

Mr. ANGEL. Well, the media pundits put forth two proposals.

One, on the same day as the Saudis made their announcement, there were also news reports of further turmoil in Nigeria of pipelines being blown up and supply disruptions there.

At the same time, in the last year we have a number of political jitters with regard to Iran and their activities that are also causing fears in the oil market that there may be even more serious supply disruptions to come.

Chairman LIEBERMAN. This is something that has bothered me about the futures markets from the 1990s when the Committee last did an investigation of the run-up in fuel prices, because I understand that there has to be some place for psychology here, but so

[1] CFTC's response to Senator Carper's question for the Record appears in the Appendix on page 360.

much of this is psychology, and here is the difference: The concern about Iran and the crisis there, that is still iffy. It is speculation. Whereas, the Saudi announcement to put this enormous increase in oil into world markets every day is real. So I do not understand why it is not bringing the price of gasoline down. Mr. Newsome.

Mr. NEWSOME. I could give a couple of comments, Mr. Chairman.

One, typically when we look to supply and demand in oil, it has been driven very hard by the supply function. Today, when we look at market fundamentals, it is being driven by the demand function. And the demand function information is much more difficult to put together, particularly when you are talking about China and India.

With regard to the Saudi announcement, two things I would add—and I am not an oil market analyst, but as someone who is very involved in these markets—first of all, the production that they are talking about adding to the market right now is very sour. It is very costly to refine and is having little impact with regard to the kind of oil that refineries actually want.

With regard to their longer-term projections—and I think it is OPEC in general—we have heard lots and lots and lots from OPEC in the past, and the market usually does not move until they actually see it put in place.

Chairman LIEBERMAN. So you are hopeful by the end of that answer that once the Saudis really begin to pump more oil that we will see some reduction?

Mr. ANGEL. Yes. The market will wait for them to actually do it before it moves.

Chairman LIEBERMAN. Well, that is at least hopeful.

Mr. Greenberger, do you want to add something?

Mr. GREENBERGER. The materials I have read on this demonstrate that OPEC and the Saudis believe that increased production will not reduce the price in this market. I think they are saying we are going to show you that is the case.

Chairman LIEBERMAN. Right.

Mr. GREENBERGER. And the reason is either you accept or you do not accept that the speculation is driving this market away from supply-demand fundamentals. I was shocked yesterday when there was no price rise on uninsured interests of Saudi supply. I thought at least temporarily something would get done lowering prices.

Chairman LIEBERMAN. Right.

Mr. GREENBERGER. But the whole burden of the testimony that you had on May 20, and yesterday in the House, is the market is unhinged from supply-demand fundamentals. That is not to say we do not have a supply-demand problem. But the oil experts who testified yesterday are independent consultants. I do not think they have a political agenda. They are all saying, and OPEC is saying, and Exxon Mobil is saying, and Sunoco is saying, at the highest, oil should be $80 a barrel.

Now, with regard to Dr. Angel, who says he could go anywhere to trade a futures contract, he could go anywhere to execute a trade. I hope he can get out of the trade. You have got to have liquidity. That is why people are not going to Oman to trade West Texas Intermediate. The whole concept and the reason we want speculators in the market is to create liquidity. Frankly, I get a lot of e-mails every day from somebody in Nigeria who wants to give

me $20 million. I would suggest, Dr. Angel, treat those offers with prudence.

Chairman LIEBERMAN. All right. My time is up. I would say that I hope Mr. Newsome is right, that when the Saudis actually do raise their daily production, 500,000, 700,000 barrels of oil, that the price of gasoline and home heating oil will go down. If it does not, then watch out because I think this Congress is going to say there is only one explanation for this disastrous run-up in oil, gasoline, home heating fuel prices, and that is speculation. And there is going to be regulation.

Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

Mr. Newsome, in my opening remarks I talked about the soaring cost of home heating oil, which is my constituents' No. 1 concern, especially since the vast majority of them rely on home heating oil to stay warm. And they are truly frantic about what is going to occur this winter.

A home heating oil dealer in Maine discussed with me a concern that he has with NYMEX's heating oil contract. What he told me is that although home heating oil and diesel are similar products, they are not identical because of differing levels of sulphur. Yet on NYMEX, they are traded together, he says, under the HO symbol.

His theory is that by combining those two products, the cost of home heating oil is being driven higher than it otherwise would be. He points out this is summertime, the time when demand is lowest, and yet the cost of home heating oil is very high. He believes it is being traded with diesel for which the demand is high.

Could you comment on this issue? This is a major home heating oil dealer in Maine with a lot of experience, and he does believe this is another factor exacerbating the price of home heating oil.

Mr. NEWSOME. I am more than happy to, Senator. Obviously, it is a derivative product from crude oil, as is gasoline. We list a heating oil contract, and it is listed and traded as heating oil. Other market participants, however, manage their risk through hedging our heating oil contract against their needs for diesel and against their needs for jet fuel, which are both relatively similar to heating oil. And then there is a basis difference between the cost of heating oil and whether it is diesel or jet fuel.

So NYMEX lists it as a heating oil contract. We trade it as a heating oil contract, other market participants use to hedge diesel and jet fuel risk.

Senator COLLINS. But if you separated it on your futures markets, would it be advantageous for the purchasers of home heating oil?

Mr. NEWSOME. I do not believe so. It is a relatively small contract now, and we recognize that others trade it. It helps provide liquidity in that contract that is beneficial to all who need to hedge. If we separate it out, the participants who need it only to trade jet fuel or who need it only to trade diesel, then it would become a very small illiquid contract on its own.

Senator COLLINS. Thank you.

Professor Angel, I want to talk to you about the swaps loophole. I know that you are not enthusiastic about two of the three proposals that are being discussed for legislation, but it does seem to

me, based on my reading of your testimony, that you do believe the proposal to close the swaps loophole and give the CFTC more authority does have some merit. Is that accurate? And if so, could you elaborate on that? If I am not correct, then you do not need to elaborate on it.

Mr. ANGEL. Certainly. Yes, that is accurate. The swaps loophole basically says that swap dealers are treated as hedgers, and, indeed, that is legitimate in that they have an exposure on one side in the over-the-counter market, and they hedge that position in the regulated futures market.

Now, the problem is that provides a direct conduit between the unregulated over-the-counter market and the regulated markets so that the unregulated markets are providing substitutes that feed back into the regulated market. And I think it makes sense to give the CFTC some authority to regulate that.

Senator COLLINS. Thank you.

Mr. Quinn, do you have any objections to closing the swaps loophole?

Mr. QUINN. We are not really technical experts on that, but I think we would be in favor of the transparency aspects as well. And that is exactly what I think the professor explained, being able to see what is happening on both sides. So we would be supportive of it.

Senator COLLINS. Mr. Newsome.

Mr. NEWSOME. Yes, we support the full transparency.

Senator COLLINS. Is there anyone on the panel who does not support that provision?

Mr. LUKKEN. Can I just mention one thing?

Senator COLLINS. Mr. Lukken.

Mr. LUKKEN. As we look at the information that we will be getting from swap dealers, we want to make sure, as the proposal, I think, talks about greater transparency in looking through to those markets. I just want people to be mindful, too, that we want to give these investment banks opportunities to manage their risk in the regulated marketplace, that as we think through proposals, that we are not cutting off a regulated avenue for them to come onto markets where there is transparency. Certainly Bear Stearns and other examples recently, we have seen where they——

Senator COLLINS. Not a great example.

Mr. LUKKEN. They have been off from regulated marketplaces. So we want to make sure they have a transparent avenue onto those markets when we consider all these proposals.

Senator COLLINS. Thank you, Mr. Chairman. I also recognize that we do not have investment banks represented at this panel, which might have a different view, although I think any observer of this hearing would commend the Chairman for having a panel with so many diverse views. So thank you, Mr. Chairman.

Chairman LIEBERMAN. Thank you, Senator Collins. I thank the witnesses. It has been a very constructive morning from my point of view and I think a healthy exchange of ideas. As we indicated last week, Senator Collins and I are now going to sit back and consider what has been said here and elsewhere. And our strong intention is to introduce legislation after the 4th of July recess, which would be the week of July 7, hopefully. And, again, I think this is

urgent enough—and I hope this is a case where the bipartisan interest in doing something about the run-up in fuel and food prices is not limited to this Committee—that we can get a bipartisan willingness to devote some floor time in the Senate and House to this before we break certainly this fall. So we are going to push forward with what we believe will be a reasonable and constructive package after the recess.

I thank all of you very much. We are going to leave the record of the hearing open for 15 days so that you can add anything you would like to your testimony. And if Members of the Committee have additional questions they want to ask, we would ask you to respond to them in that time frame.

Thank you very much. The hearing is adjourned.

[Whereupon, at 1:16 p.m., the Committee was adjourned.]

APPENDIX

OPENING PREPARED STATEMENT OF SENATOR LIEBERMAN FOR MAY 7, 2008

Good morning and welcome to our hearing today. This is the first of at least two hearings this Committee will hold to examine the rapid increase in the price of food occurring here in the United States and across the globe, and to consider actions the Federal Government should take or change to alleviate the pressure these high prices impose on American families. I want to thank Senator Collins for her suggestion that we hold these hearings on an issue of such real concern to so many Americans.

The specific issue we will examine today is the effect of Federal Government subsidies for ethanol on the current food crisis. In a couple of weeks, we will ask whether speculators are driving up commodity prices. According to the USDA Economic Research Service, food prices in the United States will increase 4 to 5 percent this year, the largest annual increase since 1990, with the increase disproportionately affecting low-income consumers whose food expenditures make up a larger share of their total expenditures. Overall, U.S. households spend 12.6 percent of their income on food, while low-income households spend 17.1 percent on food.

The World Bank reports that global food prices have increased by 83 percent in the last 3 years, a devastating rate of inflation when you understand that Nigerian families spend 73 percent of their budgets on food, the Vietnamese spend 65 percent, and Indonesians spend half their incomes on food. People have already died in food riots in Somalia, World Bank President Robert Zoellick warns that 33 other nations are at risk of unrest, and one billion Asians are at risk of hunger or malnutrition.

So how did this crisis come to be? In a complex global economy, the domino effect began with lower than expected wheat harvests in the United States and Europe last year, prolonged drought in Australia and Eastern Europe, and poor weather in Canada, Western Europe, and the Ukraine. As supplies waned, prices rose, and some major grain producers, such as Argentina and Ukraine, barred exports to control costs at home, further reducing supplies and driving prices even higher. At the same time, global food consumption is increasing as developing nations develop. A rising middle class in India and China is causing increased demand for meat, which requires more feed grains. The record high price of oil increases food production, processing, and transportation costs. And finally, a weak dollar has increased the purchasing power of other countries' currencies that are stocking up on relatively cheap U.S. food exports.

Then, late last year—in an effort to promote American energy independence and help reduce the greenhouse gas emissions that are causing global warming—Congress required a fivefold increase in renewable fuels, which in turn led to an increase in demand for corn, and a further decrease in supplies of wheat and soybeans as farmland that traditionally was used to grow these crops has been converted to the more profitable corn crop.

This confluence of events has had a dramatic impact on food prices as events spin off one another, creating a cycle of rising demand, dwindling supplies, and unstable prices. If you are poor, the effects can be deadly.

The question is how we in Congress can help bring some relief. First, and probably foremost, Congress can and should consider strengthening the food assistance programs on which those Americans who are most at risk rely. Second, Congress is now in the midst of heated debate on a number of policies that will affect future food prices. The Food, Conservation, and Energy Act of 2008 (farm bill), for example, now in conference, would reduce subsidies for ethanol producers. The current 54-cents-per-gallon tariff on foreign imports of ethanol used as fuel is set to expire at

the end of Fiscal Year 2009 and Congress could take action to lower it. And third, the Renewable Fuel Standard imposed in last year's energy bill could be reduced.

This Committee has the unique ability to look across the Federal Government to assess the range of policies that influence the price and availability of ethanol in the marketplace. The policies we discuss today have the potential to shape future debates on the best way for Congress to respond to this global food crisis, and I am glad to welcome our witnesses who will help us better understand this issue.

Andrew Siegel is the owner of When Pigs Fly Bakery, in York, Maine. He will discuss how rapidly rising commodity prices have negatively impacted his business. Rev. David Beckmann, President of Bread for the World, an organization that works to end world hunger, will talk about how rapidly rising food prices have led to a global food crisis. Bruce A. Babcock is an agro-economist from Iowa State University, who contends that passage of the expanded Renewable Fuel Standard was the tipping point in a number of factors that have caused unstable food markets. And Mark W. Rosegrant is Director of the Environment and Production Technology Division of the International Food Policy Research Institute. He will discuss the impact of global biofuels policies on food prices. Gentlemen, thank you in advance for your testimony.

PREPARED STATEMENT OF SENATOR COLLINS FOR MAY 7, 2008

Today we consider whether a change in American agriculture policy aimed at reducing our reliance on imported oil may be having serious, unintended consequences for food supplies and prices.

According to the World Bank, global food prices have increased by 83 percent in the past 3 years. Here in the United States, an analysis of April 2008 prices shows even more remarkable one-year increases:

- wheat, up 95 percent,
- soy beans, up 83 percent,
- corn, up 66 percent, and
- oats, up 47 percent.

Such increases in basic commodities naturally work themselves through the food-supply chain. According to the U.S. Department of Agriculture, consumer prices for all foods increased by 4 percent in 2007—the highest annual rate since 1990—and the Department projects continued increases.

The consequences reach far beyond data cells on some spreadsheet. They affect families who are forced to cut back on bread, meat, and dairy purchases and to apply their economic-stimulus checks to their grocery bills. The nutritional threat, especially to lower-income families with children or to senior citizens with limited incomes, is clear. The high prices and shortages also hurt small businesses like the Maine family bakery whose future is less secure due to escalating costs.

The global consequences are also grim. As World Bank President Robert Zoellick warned last month, "33 countries around the world face potential social unrest because of the acute hike in food and energy prices. For these countries, where food comprises from half to three quarters of consumption, there is no margin for survival." The impact of rising prices, food shortages, and export restrictions has devastating consequences for the billion people around the world living in dire poverty.

We need a clearer view of how biofuel policies shape this troubling picture. So I am pleased that the Chairman has agreed to have the Committee carefully examine this issue.

Subsidies for ethanol production, tariffs on ethanol imports, and mandates for ethanol use have certainly had an impact on the U.S. corn crop. In 1997, only 5 percent of the corn harvest was used for ethanol production. That portion grew to 20 percent of the 2006 harvest. The Department of Agriculture estimates that 24 percent of last year's corn crop is currently being used for ethanol, and that ethanol's claim on the 2008 harvest will climb to 33 percent.

Not surprisingly, increased demand for corn-based ethanol has diverted acreage from crops like wheat and soybeans to corn and has had ripple effects on the cost of feed for livestock.

The USDA's Long-Term Projections, released in February, note that the strong expansion of corn-based ethanol production affects virtually every aspect of the field crops sector, from domestic demand and exports to prices and allocation of acreage among crops. After 2008, the USDA believes that the high returns for corn crops will lead to still further reductions in wheat and soybean planting. As our witness from a Maine bakery will attest, such changes in the use of distant croplands can have profound local effects.

Certainly, American and European policies that promote corn or other food crops for ethanol are not the only factors in the sharp increase in food prices. Other factors include higher food demand in developing countries, higher energy and fertilizer costs, and weather events like the drought in Australia.

Many of these factors are beyond the control of mankind, much less governments. By contrast, however, biofuel subsidies and mandates are within the control of governments. And the International Food Policy Research Institute estimates that, globally, biofuels development may account for a quarter to a third of the increased costs of food. We must therefore examine the impact that American biofuel policy is having on the global food crisis and whether our policy needs to be adjusted to mitigate unintended consequences in the United States and elsewhere.

This is not an abstract matter of public policy. It affects the poorest people in our country and our world. It affects our bakeries, markets, restaurants, and family kitchens here and around the world. I look to today's witnesses for assistance in helping us better understand the trade-offs inherent in our current biofuels policy.

PREPARED STATEMENT OF SENATOR MCCASKILL FOR MAY 7, 2008

As we will hear today, there is no singular cause to the rising cost of food. Among the contributing factors are higher energy costs that increase transportation, processing, and retail costs; low global food grain and oilseed supplies due to drought and poor harvests; changing eating habits due to rising incomes in large, rapidly emerging economies; demand for corn for ethanol competing with food and feed acreage; and increased U.S. exports as a result of a weakening dollar. What we are certain of though is that the high cost of food disproportionately affects our lower income citizens and the backbone of our economy, small businesses.

It is imperative as we move forward in understanding and in responding to the rising cost of food that we do so in a measured and reasoned manner. Our solutions should balance not only the immediate needs to reduce the costs of food, but also the nation's long term energy needs and carbon reduction objectives. It is important to note that any change in existing energy policy involving corn-based ethanol will not have an effect for at least two years, given 2008 crops are already in the ground and the harvest for 2009 will not be reaped until late in that year.

Short term fixes such as waivers to Renewable Fuel Standards (RFS) have been proposed to reduce demand on corn—argued to reduce corn being diverted to ethanol production and freeing up acreage used currently in corn production for wheat production. The RFS requires the blending of 9.0 billion gallons of renewable fuel in transportation fuels in 2008, increasing to 36 billion gallons in 2022. Although increased ethanol production has contributed to the increase in food prices, the overall cost of crude oil and labor, coupled with increased global demand and reduced harvests also are principal causes of increased food prices. Studies indicate ethanol has kept fuel costs up to $0.40 cents cheaper in some parts of the U.S., as we face gasoline prices over $3.50 per gallon.

Energy costs affect all levels of the food production sector. Recent record crude oil prices in excess of $120 per barrel affect costs throughout the marketing chain. Some of these costs are passed on to consumers in the form of higher prices. In 2005, the most recent year for which data are available, direct energy costs and transportation costs accounted for roughly 8 percent of retail food costs.

Clearly the $0.40 reduction in the price of fuel is a positive outcome of the RFS. We may learn today that the market will demand this cheaper alternative to fossil fuels and continue to refine corn into ethanol regardless of the RFS and other incentives. I believe corn-based ethanol and biodiesels are components of the long term solutions to the nation's varied energy needs; however, I believe we need to broaden our scope beyond food commodities to alternative sources.

Specifically, cellulosic sources such as corn stover and switchgrass can be a viable option for replacing some of the feed stocks currently occupied by corn. There are positive indications that with additional research and technology advancements, cellulosic biofuels can be a viable fuel option. Incentives that help the development of these types of advanced biofuels will not only allow us to diversify our fuel options but will also relive many of the sustainability concerns around corn based ethanol. At a time when we are facing unprecedented fuel costs and increasing inflation, I think the best policy is to invest in these untapped sources of cellulosic energy.

I look forward to the testimony we are to hear before this Committee today.

PREPARED STATEMENT OF SENATOR STEVENS FOR JUNE 24, 2008

Thank you Chairman Lieberman and Ranking Member Collins, and to our distinguished panelists for your attention to this critical issue.

Today, the average price of a gallon on gas is $4.08. In some parts of Alaska, the price of a gallon of gas is over $8.00.

There are not many immediate solutions but I am certain that this hearing—and related legislation—will help. The disruption in supply from the attack on Shell's platform in Nigeria last week reminds us that oil prices are volatile enough without allowing speculators to run unregulated.

With the Fourth of July bringing the peak of summer travel next week, Congress should act on this energy crisis before we all travel home while other Americans cannot afford to do so due to fuel costs.

Most foreign producers believe Americans will pay any price for oil. Congress validates this belief each day that we fail to implement a comprehensive energy strategy.

Americans are being taken advantage of not only by OPEC, but by speculators who are exempt from regulation by the U.S. Commodity Futures Trading Commission. When speculation in oil markets does occur, I believe there should be a legitimate reason for it.

I would certainly define legitimate speculation to encompass the physical market for oil. Anytime an entity has the business need and capacity to make or take delivery of the product, their ability to buy futures contracts is necessary.

But Congress must recognize that speculators who are not consumers of oil are hijacking the market, they are just trading paper barrels, not physical volumes of oil.

There should be a limit on the extent to which investors in petroleum futures can increase their positions in this important commodity market. It should be a crime when speculators knowingly manipulate oil prices and drive up the price of fuel at the expense of the American family.

Such actions undermine our country's energy stability and energy security. Even major institutional investors have taken up oil futures markets as a major asset class in their financial portfolios.

In the last 5 years, investments in commodity index funds jumped from $13 billion to $260 billion, and this increase is mainly comprised of oil futures. Excessive speculation in oil futures is causing our economy to decline.

Our domestic oil crisis has combined with our economic instability and excessive oil speculation to become a vicious cycle. As energy prices continue to cripple our economy, inflation rises and the dollar weakens.

One of the few places that investors see a safe bet is in energy markets because they know oil demand will continue to increase. I recently stated on the Senate floor that IEA predicted world oil demand to increase from 85 million barrels per day to 116 million barrels per day.

That is the reality and that is the future of oil. Therefore, more investors want to increase their positions in oil futures. Immediately, the CFTC needs to conduct a review to examine where unregulated trading in oil futures has most impacted the market. There must be full disclosure from anyone taking part in the oil speculation game. Last year Senator Feinstein and I worked across party lines to pass CAFE, which is the first Federal increase in vehicle fuel efficiency in three decades.

Now, we work together again on S. 3131, the Oil Speculation Control Act of 2008. This bill requires the CFTC to identify and crack down on the oil commodity futures markets that have spun out of control.

I would also like to point out what I am sure most if not all of our panelists will confirm: That oil speculation is driven by expectation. We can and should address part of high fuel costs by clamping down on the unfair exemptions in commodity markets.

But so long as Congress fails to address the supply side of this issue we will not solve the problem. I have predicted higher oil prices many times simply due to my recognition that relying on unstable foreign sources of oil creates the potential for disruption and abusive pricing of our supply.

Speculators also recognized that and therefore have been able to make a killing buying up futures contracts. It would be an understatement to say America needs a comprehensive approach. America needs a full court press against our energy crisis.

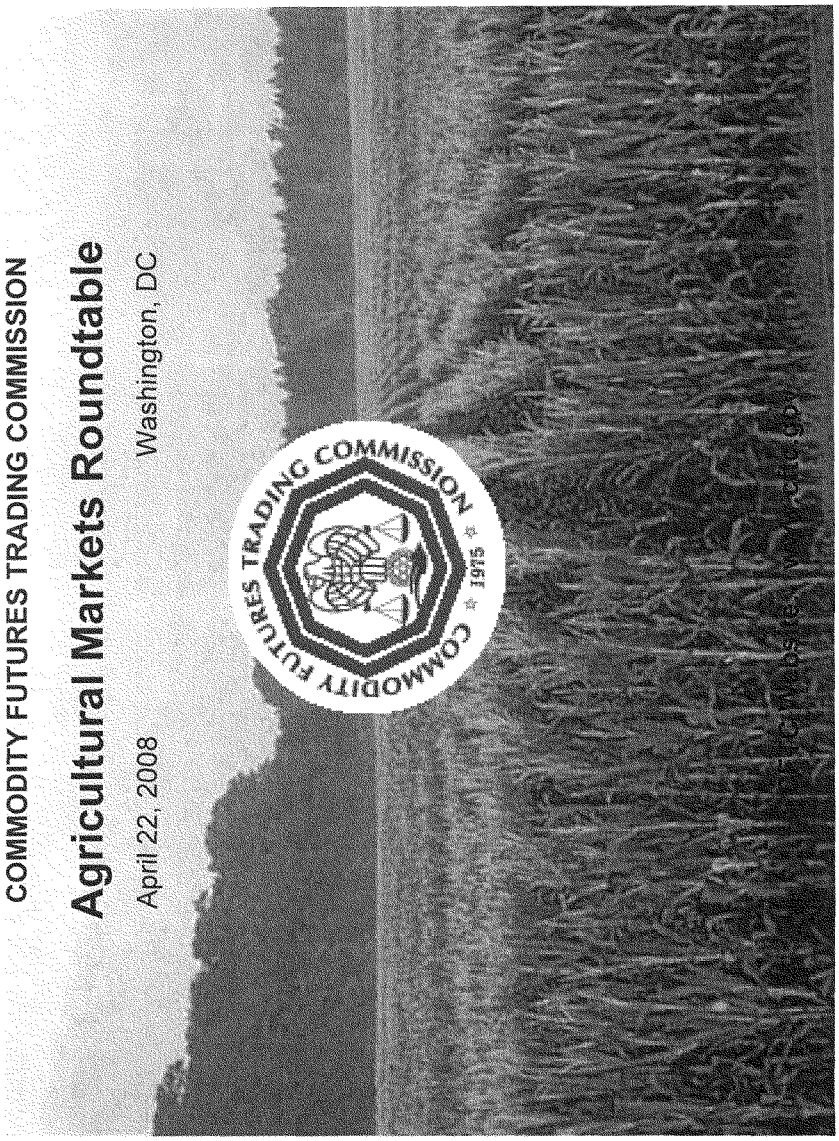
This must include powerful signals to the world market that we will produce more, conserve more, research more alternatives and, when absolutely necessary as it is today, regulate more.

Speculators and competing world oil suppliers would take notice of this approach the moment Congress approves it.

The fact is that the prospect of more supply coming online, together with conservation measures such as CAFE and investment in renewable energy, will combine to give speculators less to speculate about.

Again I thank the Chairman and the Ranking Member and look forward to the testimony.

SUBMITTED BY SEN. COLLINS



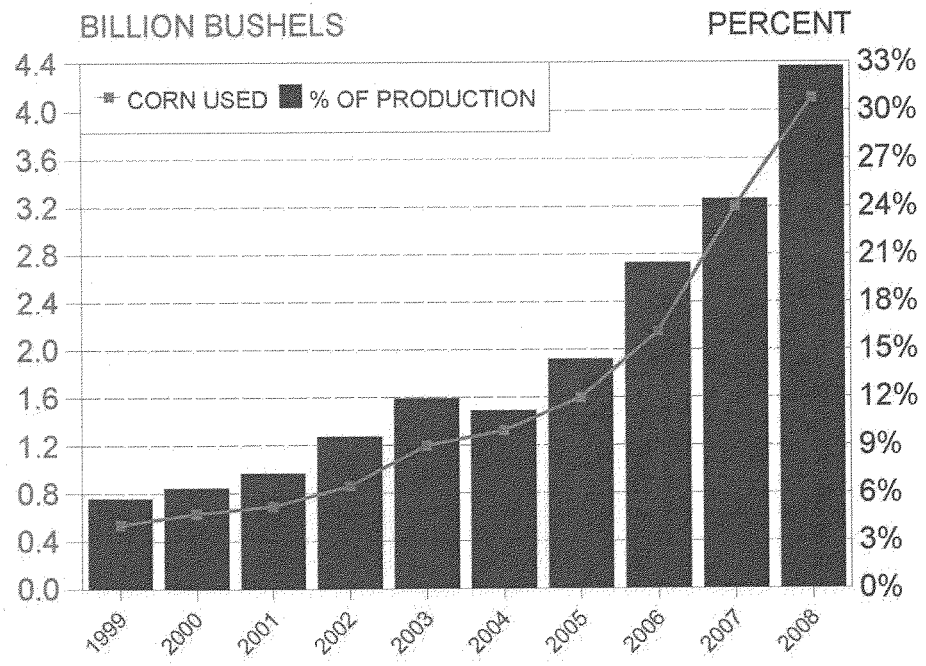
% Annual Price Changes

April 2007 – April 2008

COMMODITY	Price Change
RICE	**122%**
WHEAT (KCBT)*	**99%**
WHEAT (CBOT)*	**95%**
SOYOIL*	**88%**
SOYBEANS*	**83%**
CRUDE OIL (NYMEX)	**82%**
SOYMEAL	**73%**
CORN*	**66%**
COTTON*	**48%**
OATS	**47%**
GASOLINE	**41%**
COCOA*	**37%**
GOLD	**37%**
SUGAR (#11)*	**30%**
COFFEE*	**24%**
PRODUCER PRICE INDEX	**7%**
MILK	**5%**
LEAN HOGS*	**-5%**
FEEDER CATTLE*	**-7%**
LIVE CATTLE*	**-7%**
LUMBER	**-14%**

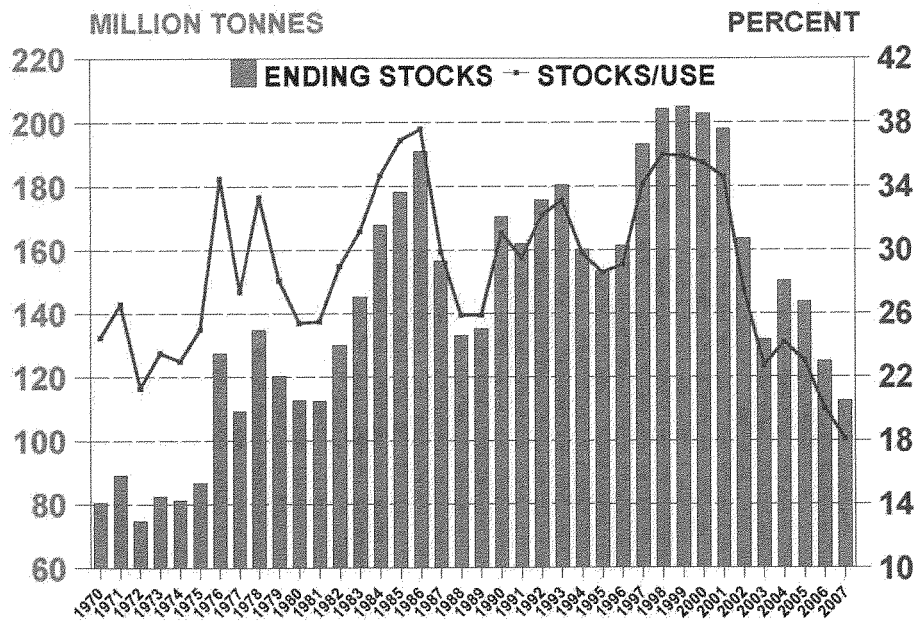
*Included in COT Supplemental Report

U.S. CORN USED FOR ETHANOL



2008 CORN PRODUCTION AND ETHANOL NUMBERS ARE FROM THE FEBRUARY 2008 USDA BASELINE REPORT

WORLD ALL WHEAT ENDING STOCKS AND STOCKS-TO-USE RATIO
1970/71 THROUGH 2007/08



2007 WORLD ENDING STOCKS ARE THE LOWEST SINCE 1977 AT 112.48 MMT (4.13 BILLION BUSHELS)
WORLD STOCKS TO USE IS THE LOWEST ON RECORD AT 18.1%

SUBMITTED BY SEN. CARPER

For release: Jan. 13, 2008, 11:30 a.m. EST

GM, COSKATA PARTNER IN BREAKTHROUGH ETHANOL TECHNOLOGY

Process Makes Ethanol from Renewables Including Trash and Old Tires

DETROIT – General Motors announced a partnership Sunday with Coskata Inc. to use the company's breakthrough technology that affordably and efficiently makes ethanol from practically any renewable source, including garbage, old tires and plant waste.

Coskata, which was formally introduced at GM's opening press conference at the North American International Auto Show, uses a proprietary process that leverages patented microorganisms and bioreactor designs to produce ethanol for less than $1 a gallon, about half of today's cost of producing gasoline.

"We are very excited about what this breakthrough will mean to the viability of biofuels and, more importantly, to our ability to reduce dependence on petroleum," GM Chairman and CEO Rick Wagoner said.

Coskata's process addresses the issues most often raised about grain-based ethanol production.

According to Argonne National Laboratory, which analyzed Coskata's process, for every unit of energy used, it generates up to 7.7 times that amount of energy, and it reduces CO_2 emissions by up to 84 percent compared with a well-to-wheel analysis of gasoline.

Coskata's process uses less than a gallon of water to make a gallon of ethanol compared to three gallons or more for other processes.

Coskata, based in Warrenville, Ill., can use its technology practically anywhere in the world where a carbon-based feedstock is available.

For GM, this could lead to joint efforts in markets such as China, where growing energy demand and a new energy research center could jumpstart a significant effort into ethanol made from biomass, Wagoner said.

More immediately, GM will receive the first ethanol from Coskata's pilot plant in the fourth quarter of 2008. The fuel will be used in testing vehicles at GM's Milford Proving Grounds.

GM is the auto industry leader in offering consumers a choice of flex-fuel cars and trucks that run on E85 – any blend of ethanol and gasoline up to 85 percent ethanol – or gasoline only. GM produces more than 1 million flex-fuel vehicles a year and has 3.5 million on the road globally.

In the U.S., GM has more than 2.5 million FlexFuel vehicles on the road and is committed to making half its production flex-fuel capable by 2012. GM sells 11 E85-capable models this year and will increase that to more than 15 models for the 2009 model year.

GM has worked in partnerships with businesses, university and non-governmental organizations during the past two years to grow the U.S. infrastructure for E85, helping to open 300 fueling stations in 15 states. Helping make the fuel more readily available was the next logical step.

The timing of the GM-Coskata partnership coincides with President Bush's signing last month of the Energy Independence and Security Act, which calls for a dramatic increase in biofuels – from 7.5 billion gallons in 2012 to 36 billion gallons in 2022. Corn- and other grain-based ethanol are expected to account for up to 15 billion gallons of that new standard with 21 billion gallons coming from cellulosic and biomass sources.

One of the criticisms of cellulosic ethanol is that its development is several years away. Coskata CEO and President Bill Roe said the next generation ethanol is here today.

"We will have our first commercial-scale plant making 50 to 100 million gallons of ethanol running in 2011, and that includes the two years it will take to build the plant," Roe said. "Success in delivering on our business plan means that we could account for a significant portion of the biomass ethanol mandated in the new Renewable Fuels Standard within 10 years."

The partnership includes an undisclosed equity stake for GM, joint research and development into emissions technology and investigation into making ethanol from GM facilities' waste and non-recyclable vehicle parts.

The Coskata partnership builds on a quarter century of GM research into biofuels and is part of GM's five-fold approach to providing energy alternatives for automobiles. These include continued efforts in making fuel-efficient engines; E85 ethanol; hybrids; electrically driven vehicles and hydrogen fuel cells.

"There is no question in my mind that making ethanol more widely available is absolutely the most effective and environmentally sound solution," Wagoner said. "And it's one that can be acted on immediately."

About GM

General Motors Corp. (NYSE: GM), the world's largest automaker, has been the annual global industry sales leader for 76 years. Founded in 1908, GM today employs about 274,000 people around the world. With global headquarters in Detroit, GM manufactures its cars and trucks in 35 countries. In 2006, nearly 9.1 million GM cars and trucks were sold globally under the following brands: Buick, Cadillac, Chevrolet, GMC, GM Daewoo, Holden, HUMMER, Opel, Pontiac, Saab, Saturn, Vauxhall and Wuling. GM's OnStar subsidiary is the industry leader in vehicle safety, security and information services. More information on GM can be found at www.gm.com.

About Coskata

Coskata is a biology-based renewable energy company for economies dependent on oil. Using proprietary microorganisms and transformative bioreactor designs, the company will produce ethanol for under $1 per gallon (USD) almost anywhere in the world, from a wide variety of input material. Founded in 2006 by leading renewable energy investors and entrepreneurs, including Khosla Ventures, GreatPoint Ventures and Advanced Technology Ventures, Coskata has compiled a strong IP portfolio of patents, trade secrets and know-how and assembled a first-class team for the development and commercialization of its

compelling syngas-to-ethanol process technology. For more information, please visit www.coskata.com.

###

Contact:

Alan Adler
GM Biofuels Communications
Phone: 248-857-4218
Cell: 313-319-8486
E-mail: alan.adler@gm.com

SUBMITTED BY SEN. CARPER

News

General Motors Corporation

GM Communications
Detroit, Mich., USA
media.gm.com

For Release: 12:01 a.m. ET
April 25, 2008

GM Role in Coskata's Cellulosic Ethanol Has Deep Roots

Pilot Plant Gasification Technology Traces to GM Ohio Foundry

MADISON, Pa. – General Motors Corp.'s role in helping Coskata Inc. bring its next-generation cellulosic ethanol to market traces back a quarter of a century to technology developed for a GM iron foundry in northwest Ohio.

Coskata announced Friday that its pilot plant will be located at the Westinghouse Plasma Center in Madison, the current site of a pilot-plant gasifier.

Gasification is the first step in Coskata's process to make ethanol out of practically any renewable source. Plasma torches are used to super heat source material, such as agricultural and municipal solid waste, to 1,600 degrees Fahrenheit, which creates a synthesis gas comprised of carbon dioxide and hydrogen.

The gas is cooled to about 100 degrees Fahrenheit and then is consumed by Coskata's patented microorganisms, which excrete ethanol and some water.

In 1983, the GM Central Foundry Division collaborated with Westinghouse Electric Corp., later known as Westinghouse Plasma Corp., and others to develop a high-volume plasma torch furnace, called a plasma arc cupola, that could more flexibly produce molten iron used to make automotive engine blocks, crankshafts and brake components.

GM's first application of plasma torch technology was in 1989 at its foundry in Defiance, Ohio, where it is still used today.

(MORE)

"Who knew this process would be used more than 20 years later to make cellulosic ethanol?" said Chris Desautels, Defiance Facilities Engineering Manager. "Coskata's process could dramatically change the biofuels landscape in the next five to 10 years and it has some of its roots right here in Defiance."

At its commercial scale plants, Coskata intends to use WPC Marc-11 plasma torches, which have been proven in metallurgical and waste-to-energy commercial applications throughout the world. The Marc-11 torches have more than 500,000 hours of operation in industrial settings, including the GM Defiance foundry.

A smaller version, the Marc-3, will be used in Coskata's Madison facility. A WPC Marc-3 has been used in Japan to gasify municipal solid waste for more than five years.

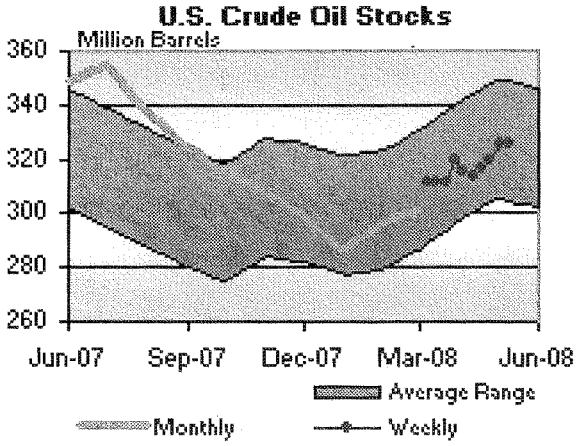
General Motors Corp. (NYSE: GM), the world's largest automaker, has been the annual global industry sales leader for 77 years. Founded in 1908, GM today employs about 266,000 people around the world. With global headquarters in Detroit, GM manufactures its cars and trucks in 35 countries. In 2007, nearly 9.37 million GM cars and trucks were sold globally under the following brands: Buick, Cadillac, Chevrolet, GMC, GM Daewoo, Holden, HUMMER, Opel, Pontiac, Saab, Saturn, Vauxhall and Wuling. GM's OnStar subsidiary is the industry leader in vehicle safety, security and information services. More information on GM can be found at www.gm.com.

# # #

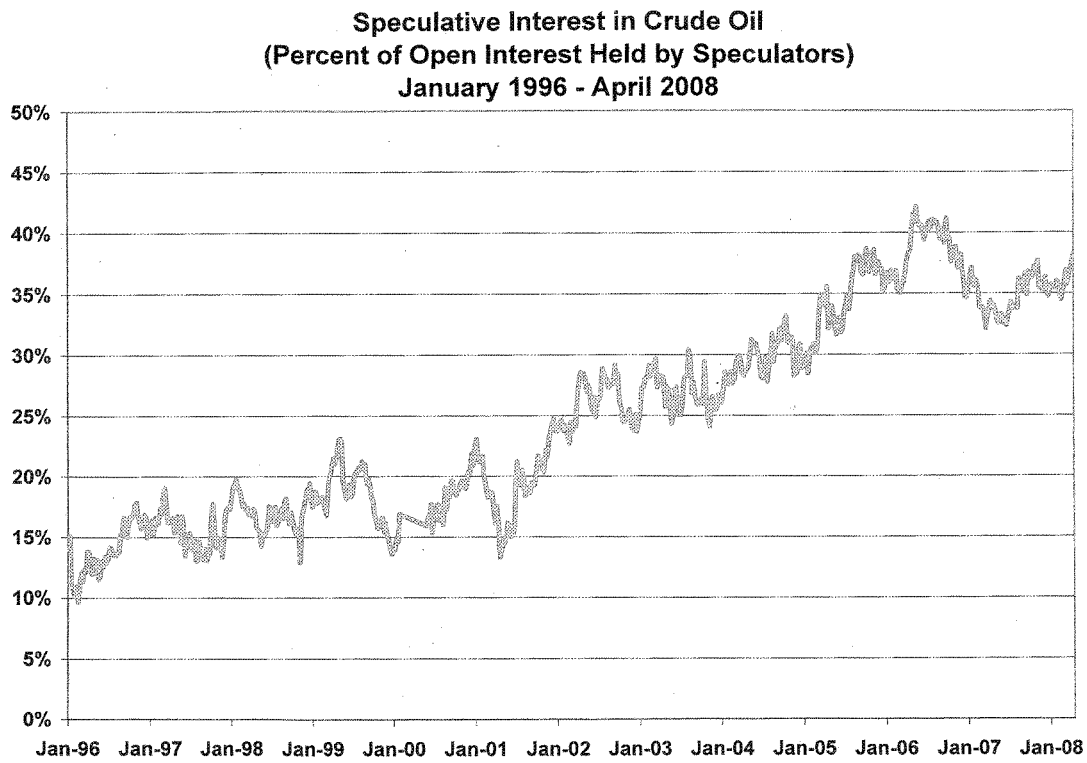
Contact:

Phil Colley
GM Biofuels Communications
Phone: 248.857.4131
Mobile: 248.613.9317
Email: phil.colley@gm.com

Alan Adler
Manager GM Biofuels Communications
Phone: 248.857.4218
Mobile: 313-319-8486
Email: alan.adler@gm.com

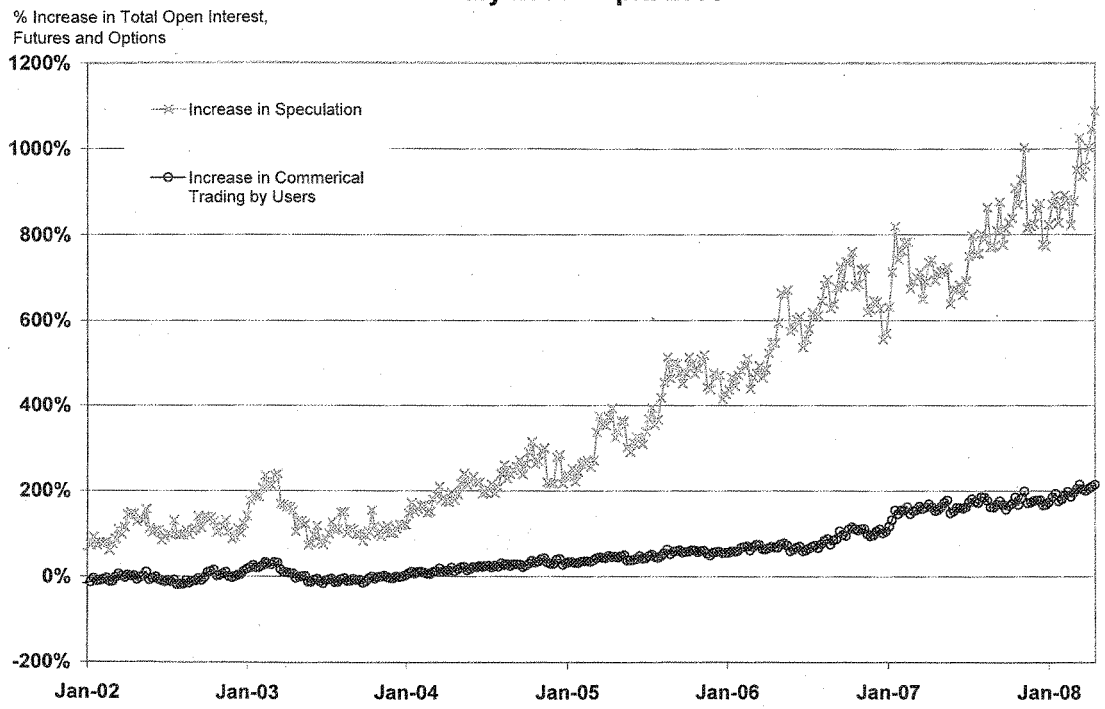

U.S. Crude Oil Stocks
Million Barrels
360
340
320
300
280
260
Jun-07
Sep-07
Dec-07
Mar-08
Jun-08
Average Range
Monthly
Weekly

Source: EIA



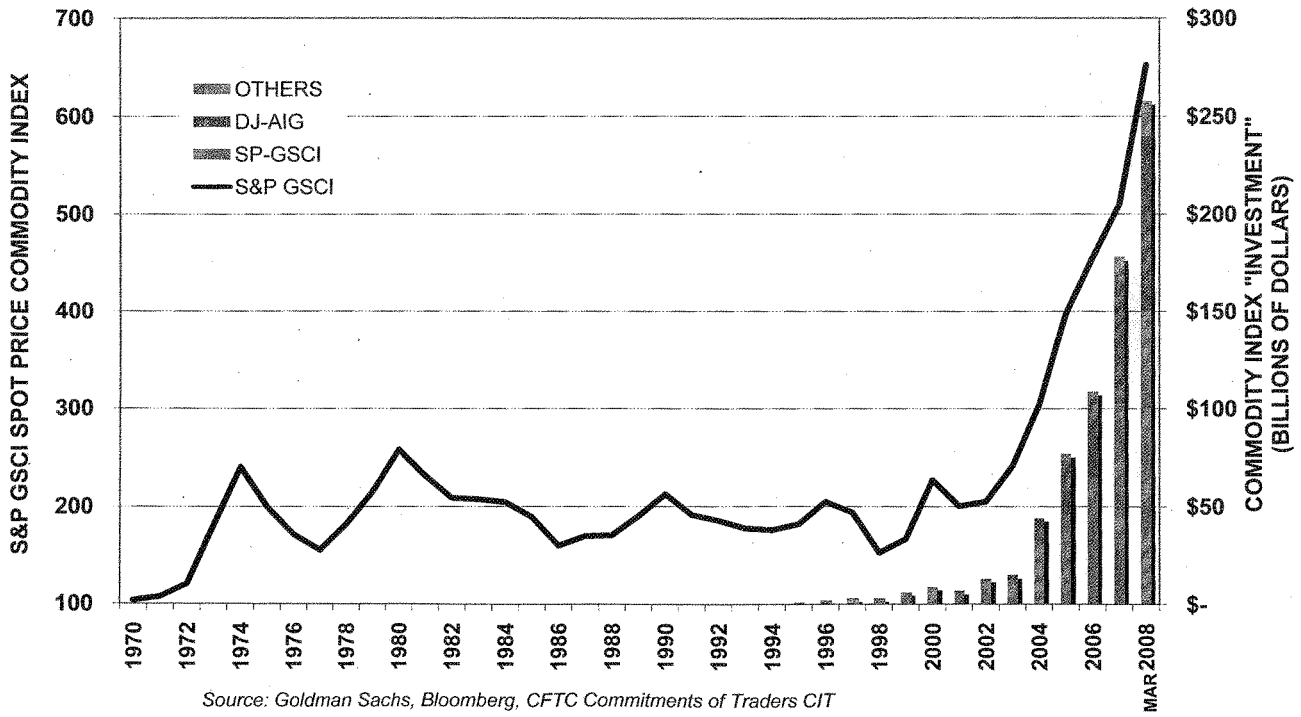
Data source: CFTC
Chart prepared by: Majority staff, Senate Permanent Subcommittee on Investigations

Increase in Crude Oil Trading and Speculation on NYMEX
January 2000 - April 2008



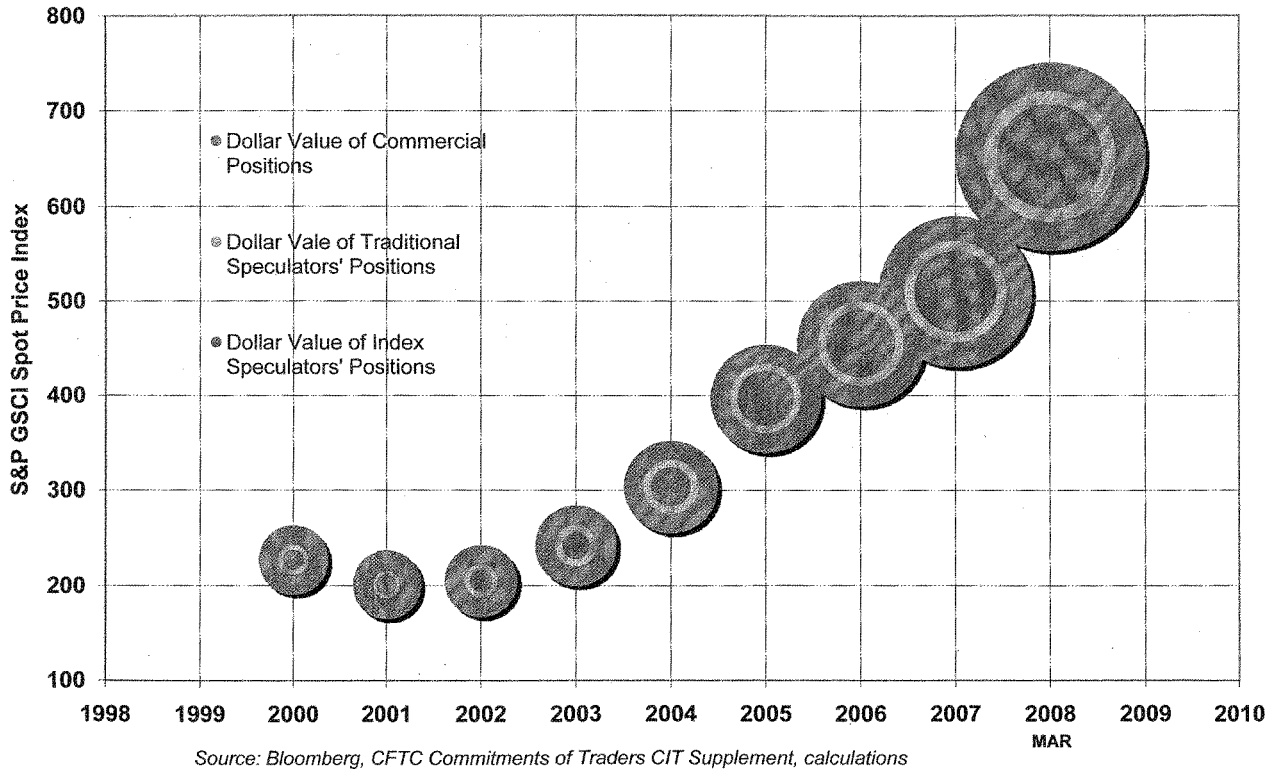
Data source: CFTC
Chart prepared by: Majority staff, Senate Permanent Subcommittee on Investigations

COMMODITY INDEX INVESTMENT COMPARED TO S&P GSCI SPOT PRICE COMMODITY INDEX



Source: Goldman Sachs, Bloomberg, CFTC Commitments of Traders CIT

Commodity Futures Market Size



Source: Bloomberg, CFTC Commitments of Traders CIT Supplement, calculations

Commodity Futures Trading Commission
Office of External Affairs
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581
202.418.5080

Recent CFTC Energy Initiatives

- In July 2007, CFTC charges hedge fund Amaranth and its former head energy trader, Brian Hunter, with attempted manipulation of the price of natural gas futures.

- In August 2007, CFTC announces Marathon Petroleum Company agrees to pay $1 million penalty to settle charges of attempted manipulation in the crude oil market.

- In September 2007, CFTC holds public hearing on electronic exempt commercial markets (ECMs) that trade energy contracts (so-called "Enron Loophole").

- In October 2007, CFTC announces BP agrees to pay a total of $303 million in sanctions to settle charges of manipulation and attempted manipulation in the propane market.

- In October 2007, CFTC provides a report to Congress with legislative recommendations on ECM trading and closing the "Enron Loophole."

- In February 2008, CFTC creates Energy Markets Advisory Committee (EMAC), consisting of market users and participants to discuss energy policies.

- In May 2008, Congress passes CFTC reauthorization legislation as part of Farm Bill that :
    - Closes the Enron Loophole using CFTC legislative language
    - Increases CFTC penalties for manipulation
    - Clarifies CFTC manipulation authority for principal to principal energy trades
    - Clarifies CFTC retail foreign currency fraud authority
    - Reauthorizes CFTC through 2013

- In May 2008, CFTC announces multiple energy initiatives, including
    - The CFTC's six month on-going National Crude Oil investigation
    - An Agreement to receive enhanced data from ICE Futures Europe in London on its crude oil markets to match our current information requirements. This allows the U.S. to see U.S. participants in the London markets but also *foreign* traders that the CFTC would not normally oversee.

- An announcement that CFTC will begin to ask for more detailed information in the crude oil markets on index traders and swap dealers and will review whether this information is being properly classified for regulatory purposes.

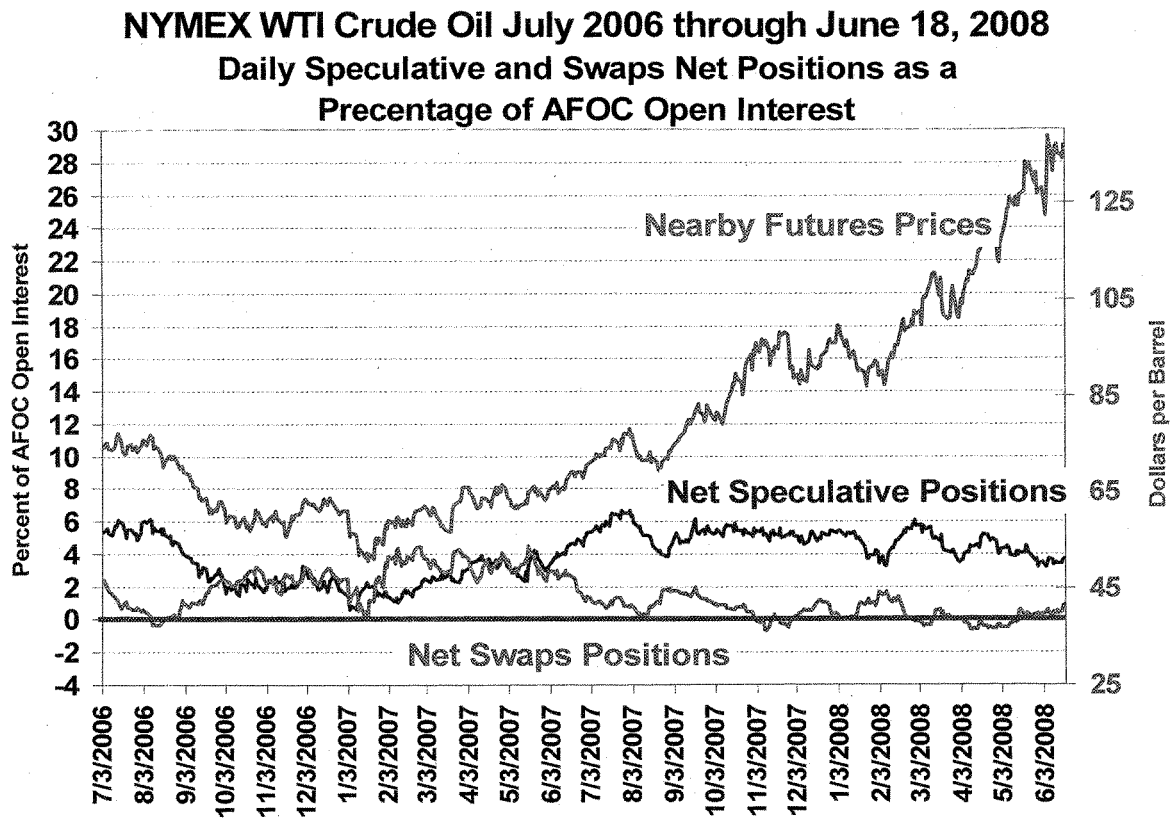
- In June 2008, CFTC hosts first EMAC meeting to discuss the role of index traders, foreign boards of trade and swap dealers.

- In June 2008, CFTC forms interagency working group with the Fed, Treasury, SEC, DOE and USDA to study investor practices, fundamental supply and demand factors, and the role of speculators and index traders in the commodity markets.

- In June 2008, CFTC hosts 2nd annual international regulators enforcement meeting in Washington DC with 10 different nations participating to discuss on-going manipulation cases and practices.

- In June 2008, CFTC announces that it will revise its foreign board of trade policy and ICE Futures Europe in London will establish comparable position and accountability limits on its crude oil contracts that are linked to NYMEX crude oil contracts.

- Since December 2002, the Commission has filed a total of 39 enforcement actions charging a total of 64 defendants with violations involving the energy markets, and has assessed almost half a billion dollars in related civil monetary penalties.



AFOC = All Futures and Delta Adjusted Options Combined Negative percentages represent net short positions.

United States Senate
PERMANENT SUBCOMMITTEE ON INVESTIGATIONS
Committee on Homeland Security and Governmental Affairs
Carl Levin, Chairman
Norm Coleman, Ranking Minority Member

JOINT ANALYSIS PREPARED BY
MAJORITY AND MINORITY STAFFS OF THE
SENATE PERMANENT SUBCOMMITTEE ON INVESTIGATIONS
OF
MICHAEL GREENBERGER TESTIMONY
BEFORE
SENATE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION
ON JUNE 3, 2008

June 24, 2008

Because many questions have been directed to the Senate Permanent Subcommittee on Investigations (PSI) about the written and oral testimony of Michael Greenberger before the Senate Committee on Commerce, Science and Transportation on June 3, 2008, we have prepared this analysis of the major issues he raised involving: (1) the recently enacted law to close the "Enron loophole," and (2) recent legislative proposals and administrative actions taken to strengthen U.S. oversight of futures contracts traded from within the United States on a foreign exchange.

The identified statements are excerpted from Mr. Greenberger's oral testimony or, where a page number is provided, from his prepared statement.

ISSUES RELATED TO CLOSING THE ENRON LOOPHOLE

1. STATEMENT: *"[The legislation to close the Enron loophole] . . . is the biggest joke in the world because it was written by the exchange that needs to be regulated."*

STATEMENT (p.3): *"Virtually all parties now agree the Enron loophole must be repealed."*

RESPONSE: The legislation to close the Enron loophole was written by the United States Congress, not the Intercontinental Exchange. Closing the Enron loophole has been the subject of repeated bills introduced on this subject since 2002. In the fall of 2007, following a PSI report and hearings on excessive speculation and the resulting move in Congress towards legislative reforms, the Commodity Futures Trading Commission (CFTC) and the President's Working Group (consisting of the Departments of Treasury, the Federal Reserve, the Securities and Exchange Commission, and the CFTC) submitted to Congress draft legislation to close the Enron

loophole. That draft underwent significant revision during the legislative process, including numerous significant changes proposed by Senators Levin, Feinstein, Snowe, Coleman and others. The final language was the product of extensive bipartisan negotiations in both Houses of Congress and a conference committee led by the House and Senate Agriculture Committees. Throughout the legislative process ICE expressed numerous disagreements with many of the provisions in the various drafts of this legislation. The final legislation did not include many of the provisions that ICE had sought.

The compromise legislation finally enacted into law as part of the Farm Bill enjoyed strong bipartisan support from Members in both Houses and from many energy, agricultural, consumer, and industrial organizations.[1] We are unaware of any consensus to alter this legislation, which represents a bipartisan achievement after years of work.

---

2. STATEMENT: *"The End the Enron Loophole, because it was written by the Intercontinental Exchange, handed to the CFTC and then handed to Congress, does not deal with crude oil."*

STATEMENT (p.4): *"Thus, by CFTC pronouncement, crude oil, gasoline and heating oil futures will not be covered by the new legislation."*

RESPONSE: These statements are incorrect or may leave an incorrect impression. The law enacted by Congress to close the Enron loophole regulates the electronic trading of all types of energy and metal commodities on Exempt Commercial Markets without exception, including crude oil, gasoline, and heating oil, if the relevant contracts perform a significant price discovery function. The CFTC has not made any statements or decisions to exempt any class of commodities or energy contracts from CFTC oversight under the new law. At the same time, as a practical matter, the new law will not affect current trading of U.S. crude oil, gasoline, and heating oil futures contracts -- not because of who drafted the law or because of any gaps in the legislation -- but because futures contracts in those commodities are not currently being traded on U.S. Exempt Commercial Markets. Rather, futures contracts in these commodities are being traded on futures exchanges in the United States and United Kingdom. Should any of those energy commodities ever be traded on Exempt Commercial Markets, the new law makes it clear that the CFTC will be able to exercise oversight over them. As a result of the legislation to close the Enron loophole, traders will no longer have the opportunity to trade crude oil, gasoline, or home heating oil on U.S. electronic markets without CFTC oversight.

---

[1] This legislation was supported by the American Public Gas Association, American Public Power Association, Consumer Federation of America, Environmental Defense, Industrial Energy Consumers of America, Independent Oil Marketers Association of New England, Mid-Atlantic Petroleum Distributor's Association, National Association of Convenience Stores, National Association of Truck Stop Operators, National Association of Wheat Growers, National Barley Growers Association, National Farmers Union, National Grange, National Rural Electrical Cooperative Association, New England Fuel Institute, Pacific Northwest Oilheat Council, Petroleum Marketers Association of America, Petroleum Transportation and Storage Association, Public Citizen, Society of Independent Gasoline Marketers of America, Steel Manufacturers Association, and Western Petroleum Marketers Association.

3. STATEMENT (p.4): *". . . the Farm Bill amendment requires the CFTC and the public to prove on a case-by-case basis through lengthy administrative proceedings that an individual energy contract should be regulated if the CFTC can prove that contract 'serve[s] a significant price discovery function" in order to detect and prevent manipulation."*

STATEMENT: *"[The legislation to close the Enron loophole] puts 1,000 burdens on the CFTC and the public to prove that there needs to be regulation."*

STATEMENT: *"[The CFTC] has to go through complicated administrative hearings, which I can tell you will be challenged vigorously by people who can afford to make those challenges, and will have to prove by substantial evidence that that contract will be regulated."*

STATEMENT (p.4): *"It will doubtless be followed by lengthy and costly judicial challenges during which the CFTC and energy consuming public will be required to show that its difficult burden has not been met."*

RESPONSE: These statements are incorrect. The new law does not place any burden on the public, does not require extensive administrative proceedings to determine that a contract performs a significant price discovery function and is subject to CFTC oversight, and does not authorize judicial challenges to CFTC decisions in this area. To the contrary, the law explicitly gives the CFTC the "discretion" to determine which contracts perform significant price discovery functions and are subject to CFTC oversight. The statute and legislative history make it clear that formal administrative proceedings are not required and judicial challenges are not permitted. For example, during the Senate's consideration of the legislation, Senator Levin explained:

> The legislation also states clearly that a CFTC determination that a contract performs a significant price discovery function is a determination that is within the Commission's discretion; this determination is not intended to be subject to formal challenge through administrative proceedings."
>
> The Statement of Managers in the Conference Report states:
>
> "The Managers do not intend that the Commission conduct an exhaustive annual examination of every contract traded on an electronic trading facility pursuant to the section 2(h)(3) exemption, but instead to concentrate on those contracts that are most likely to meet the criteria for performing a significant price discovery function.

The law directs the CFTC to determine which contracts are performing significant price discovery functions within 180 days of promulgating regulations setting forth the criteria to be considered when evaluating individual contracts.

4. STATEMENT: *"The CFTC has said that farm bill amendment [sic] will affect one out of thousands of energy contracts."*

STATEMENT (p.4): *This contract-by-contract process will take months, if not years, to complete and it will then only apply to a single contract."*

RESPONSE: These statements are incorrect. The CFTC has not made any statements or provided any indication of the number of commodities or contracts that will likely be determined to perform a significant price discovery function. The CFTC certainly has not indicated that only one contract will be covered. To the contrary, informed observers indicate multiple contracts are likely to qualify for CFTC oversight.

---

5. STATEMENT (p.4): *"Moreover, the Farm Bill's attempt to end the Enron Loophole will doubtless lead to further regulatory arbitrage. If the CFTC should be able to prove that an individual energy futures contract has contract has [sic] a 'significant price discovery function,' and thus should be subject to regulation, traders will almost certainly simply move their trading to equivalent contracts that remain exempt from regulation."*

RESPONSE: Mr. Greenberger appears to be predicting that if the CFTC determines that one particular contract performs a significant price discovery function, then traders will begin trading a different contract that hasn't been deemed to perform a significant price discovery function and isn't subject to CFTC oversight. Practical obstacles and the design of the new law, however, make this type of maneuvering unlikely.

First, it is much more difficult for a trader to use a contract that does not perform a price discovery function since, by definition, it will have a lower trading volume and fewer counterparties. During the PSI Amaranth investigation, numerous traders told the Subcommittee that the most significant factors in determining which market and contract to use for trading were price and liquidity. All of the traders interviewed by the Subcommittee stated that they would trade the contract that provided the best price and most liquidity, regardless of whether it was in a regulated or unregulated market. Secondly, if a significant amount of trading did migrate from a regulated contract to an unregulated contract simply to avoid regulation, the CFTC could readily determine that the second contract also performed a significant price discovery function and regain its ability to exercise oversight. In fact, one of the statutory factors for determining whether a contract performs a significant price discovery function is whether that contract is being used for arbitraging purposes. The new law thus contains provisions designed to prevent exactly the type of arbitrage scenario Mr. Greenberger describes.

---

6. STATEMENT: *"I would go back to the status quo ante before the Enron loophole was passed."*

STATEMENT (p.5): *"Again, the easiest course to end the Enron loophole was not chosen as part of the Farm Bill. The most effective closure would have simply returned the Commodity Exchange Act to the status quo ante prior to the passage of the Enron loophole."*

STATEMENT (p.3): *"The simplest way to repeal [the Enron loophole] would be to add two words to the Act's definition of 'exempt commodity' so it reads: an exempt commodity does 'not include an agriculture or energy commodity;' and two words to 7 U.S.C. § 7(e) to make clear that 'agricultural and energy commodities must trade on regulated markets."*

RESPONSE: Mr. Greenberger seems to be proposing a return to the legal framework for commodity trading prior to enactment of the Commodity Futures Modernization Act (CFMA) of 2000, and to require energy and metal commodities to be traded in the same way as agricultural commodities, which means they could not be traded on electronic exchanges other than a futures exchange. This approach would prohibit energy traders from trading financially settled swap instruments on electronic exchanges that are not futures exchanges, even though under the legislation the trading of significant price discovery contracts on these electronic exchanges will be regulated just like futures contracts. At the same time, the proposal would continue to permit those traders to trade these swap instruments amongst themselves by unregulated non-electronic means, such as through voice brokers, large financial institutions that operate as swap "dealers," and directly between each other using telephones and fax machines.

One of the problems with this approach is that it would re-direct trading from electronic exchanges that promote price transparency and cleared trades, two mechanisms that increase market efficiency and stability, toward greater use of unregulated, non-transparent, and non-cleared trading of swaps that impair price transparency, increase systemic risk, and make it harder to detect and prevent manipulation. It is partly because financially settled swaps do not require the physical delivery of a commodity, and partly because of the historic inability of the futures exchanges to develop active markets for more specialized types of financial and energy swaps, that Congress has never required them to be traded on fully regulated futures exchanges. To do so now would constitute a major change in U.S. commodity law, and would go much further than the status quo ante prior to the CFMA. In addition, eliminating electronic exchanges open to large traders would dismantle an accepted commodity market mechanism – the significant portions of which are now regulated -- for little apparent regulatory gain.

---

7. STATEMENT: *"Prior to the [Enron loophole], every futures contract – oil, collateralized debt obligations, credit default swaps -- had to be traded pursuant to regulation that had age-old and time-tested controls on speculation."*

RESPONSE: This statement is incorrect. Prior to the Commodity Futures Modernization Act (CFMA), large traders trading financial instruments like collateralized debt obligations, credit default swaps, and energy swaps were eligible for the hybrid and swaps exemption from the requirement that all futures contracts be traded on a regulated futures exchange. See, e.g., 17

C.F.R. Part 35 (Exemption of Swap Agreements). Persons trading swaps under the various pre-CFMA swaps exemptions were not subject to speculative position limits.

---

8. STATEMENT: *"Overnight, [prohibiting the trading of energy commodities in Exempt Commercial Markets] will bring down the price of crude oil, I believe, by 25 percent."*

RESPONSE: According to recent market data, there is little to no trading of crude oil contracts on exempt commercial markets in the United States. Prohibiting the trading of energy commodities in a market in which no trading is currently taking place is, thus, unlikely to have an effect on the price of crude oil. Moreover, although there have never been any Exempt Commercial Markets for agricultural commodities, many agricultural commodities have recently experienced substantial price spikes. There is no credible evidence that simply amending the CEA to regulate energy commodities as if they were agricultural commodities will lead to lower energy prices.

ISSUES RELATED TO CLOSING THE LONDON LOOPHOLE

9. STATEMENT: *"[B]ecause of that Enron loophole, which I believe has not been closed for crude oil, there are no speculation limits in these markets that are unregulated."*

RESPONSE: The Enron loophole has been closed for all energy and metal commodities, including crude oil traded on Exempt Commercial Markets in the United States. But currently, crude oil is not being traded on those markets.

Crude oil is instead being traded on the NYMEX exchange in New York, which has speculative position limits, and on the ICE Futures Europe exchange in London, which does not. The ICE Futures Europe exchange in London has no speculative position limits, because until recently neither the British Financial Services Authority (FSA) nor ICE Futures Europe had imposed them for U.S. crude oil contracts traded on that exchange.

Since 1982, Section 4 of the Commodity Exchange Act has authorized U.S. persons to trade on foreign exchanges and has prohibited the CFTC from imposing regulatory requirements upon those foreign exchanges. Recently, this CEA exemption has been referred to as the London loophole, since it allows U.S. traders to trade on the ICE exchange in London without CFTC oversight and without speculative position limits. On June 16, 2008, in response to concerns expressed about the London loophole, the CFTC announced that ICE Futures Europe would have to implement speculative position limits in order to be able to continue to offer U.S. traders the option of trading its U.S. crude oil contract through U.S.-based trading terminals. The CFTC is also working with the FSA on an agreement to impose speculative position limits on this contract and to alert the CFTC when any trader has exceeded those limits.

10. STATEMENT: *"There is now nothing in the law that sanctions foreign board of trades in the United States trading U.S. products being able to escape regulation. . . . What is now in my belief, illegal, and will soon, if somebody wakes up, be invalidated by either a private individual being hurt by it or a state attorney general."*

STATEMENT (p.5): *"These staff no action letters have been referred to as Foreign Board of Trade exemptions (FBOTs) – a term which as of today is nowhere found in the CEA.*

STATEMENT (p.12): *"[T]here is no statute to date that provides any exemption for U.S. trading on Foreign Boards of Trade. The Commodity Exchange Act says nothing about Foreign Boards of Trade."*

RESPONSE: These statements are incorrect. The Commodity Exchange Act (CEA) explicitly excludes trading on a foreign board of trade from key CFTC regulations. Section 4(a) of the CEA explicitly exempts from the requirement that all futures contracts be traded on a CFTC-regulated futures exchange contracts traded on or subject to the rules of any board of trade or exchange "located outside the United States." Section 4(b) prohibits the CFTC from issuing any regulation that approves or "governs in any way any rule or contract, rule, regulation, or action of any foreign board of trade."

---

11. STATEMENT (p.5): *"It has been a fundamental tenet, recognized by exchanges all over the world, that if the trading of futures contracts takes place within the United States, that trading, unless otherwise exempted or excluded by the Act itself or by the CFTC through an exemption granted pursuant to the Futures Trading Practices Act of 1992 (otherwise referred to as section 4(c)) ,is subject to the regulatory jurisdiction of the Commodity Futures Trading Commission. Recognition of that sweeping reach of U.S. jurisdiction is evidenced by the fact that most major foreign futures exchanges have asked the CFTC for an exemption from the full regulatory requirements of the Commodity Exchange Act (CEA) to which they might otherwise be subject in order to allow those foreign entities to conduct trading in the U.S. on U.S. based terminals of foreign delivered futures contracts. That exemption, premised on section 4(c), has been issued to many foreign exchanges through staff no action letters, which permit trading on a foreign exchange's U.S.-based terminals without that exchange being subject to U.S. statutory or regulatory requirements."*

RESPONSE: These statements mischaracterize the statutory and legal basis for the CFTC's determination to permit foreign exchanges to operate trading terminals in the United States without being subject to full CFTC regulation as a futures exchange. The basis for the CFTC's determination to grant a foreign board of trade or exchange permission to operate trading terminals in the U.S. without being subject to the full regulatory requirements applicable to U.S. futures exchanges is not Section 4(c) of the CEA or Futures Trading Practices Act, but rather CEA Section 4(a). Section 4(a) provides that all futures contracts traded in the United States must be traded on a regulated exchange <u>other than contracts traded on or subject to the rules of a board of trade or exchange located outside the United States.</u> 7 U.S.C. § 6(a). Futures contracts traded from within the United States on a foreign exchange are, thus, excluded by statute from

the requirement that futures contracts traded in the United States be traded on a futures exchange regulated by the CFTC.

---

12. STATEMENT (p.6): *"This exemption was entirely the creation of CFTC staff and it has never been formally approved by the Commission itself."*

RESPONSE: This statement is incorrect. The decision to allow foreign exchanges to establish trading terminals in the United States and to permit trading on those terminals outside of CFTC oversight was formally approved by the CFTC in a Policy Statement issued on November 2, 2006. The 2006 Policy Statement was issued after a process in which the CFTC sought public comment, received written comment letters, and held a public hearing on the issues raised. In the Policy Statement, the CFTC wrote:

> "The Commodity Futures Trading Commission is issuing a Statement of Policy that affirms the use of the no-action process to permit foreign boards of trade to provide direct access to their electronic trading systems to U.S. members or authorized participants, and provides additional guidance and procedural enhancements."[2]

---

13. STATEMENT (p.6): *"The staff FBOT no action letter process never contemplated that an exchange owned by or affiliated with a U.S. entity would escape the CFTC regulation imposed on traditional U.S. exchanges."*

RESPONSE: This statement is incorrect. In its 2006 Policy Statement, the CFTC determined it would not be appropriate to use any "bright-line" test based on the location of an affiliate or related corporate entity to determine whether to treat an entity as a U.S. or foreign exchange. Instead, the CFTC adopted a flexible approach that considered the totality of circumstances for determining whether an exchange was foreign or domestic, including whether the exchange was affiliated with a U.S. exchange. This approach was favored by most of the comments received by the Commission on this issue.

---

14. STATEMENT (p.3): *"For purposes of facilitating exempt natural gas futures, ICE is deemed a U.S. 'exempt commercial market' under the Enron loophole. For purposes of its facilitating U.S. WTI crude oil futures, the CFTC, by informal staff action, deems ICE to be a U.K. entity not subject to direct CFTC regulation even though ICE maintains U.S. headquarters and trading infrastructure, facilitating, inter alia, @ 30% of trades in U.S. WTI futures."*

RESPONSE: The statement gives the inaccurate impression that a single legal entity named "ICE" operates two exchanges, one in the United States and one in London, and is being treated

---

[2] Commodity Futures Trading Commission, Policy Statement, *Boards of Trade Located Outside of the United States and No-Action Relief From the Requirement To Become a Designated Contract Market or Derivatives Transaction Execution Facility*, 71 Fed. Reg. 64443 (Nov. 2, 2006).

differently depending upon which exchange is at issue. In fact, the legal entities that operate these two exchanges are different.

The legal entity that operates the electronic exchange within the United States is the Intercontinental Exchange ("ICE"). ICE is a Delaware corporation located in Atlanta, Georgia. ICE pays U.S. taxes, uses U.S. employees, and operates an exempt commercial market in the United States that, among other commodities, trades natural gas contracts.

ICE has several wholly-owned subsidiaries that operate regulated futures exchanges — ICE Futures US, ICE Futures Canada, and ICE Futures Europe. Each subsidiary has its own management and an independent board of directors. Each exchange is overseen by the regulatory authority of the country in which the exchange is physically located. The regulatory authority oversees the exchange and the subsidiary that operates the exchange, but not the parent corporation, ICE.

ICE Futures Europe operates an exchange in London and, on it, trades European crude oil (Brent crude oil from the North Sea), European heating oil, European natural gas, and other European contracts as well as a financially-settled U.S. crude oil futures contract (based on the price of West Texas Intermediate crude oil contracts traded in New York), U.S. gasoline, and U.S. home heating oil contracts. ICE Futures Europe is registered in the United Kingdom, pays U.K. taxes, has U.K. employees, is treated as a U.K. corporation, and is regulated by the U.K. Financial Services Authority.

The CFTC has not deemed the parent corporation ICE to be a U.K. entity; it treats ICE as a U.S. corporation, which it is. ICE Futures Europe, on the other hand, is a U.K. corporation, not because the CFTC has "deemed it to be" a U.K. entity, but by operation of U.K. law. Moreover, under U.K. law, the parent corporation, ICE, is not permitted to direct the activities of its subsidiary, ICE Futures Europe, in operating the London exchange. The CFTC thus treats ICE Futures Europe as a foreign board of trade, because ICE Futures Europe is, in fact, a foreign board of trade.

---

15. STATEMENT (p.3): *"[T]he statute should also be amended to forbid an exchange from being deemed an unregulated foreign entity if its trading affiliate or trading infrastructure is in the U.S.; or if it trades a U.S. delivered contract within the U.S. that significantly affects price discovery."*

RESPONSE: The 2006 Policy Statement issued by the CFTC discusses the various criteria for determining when a foreign board of trade should be permitted to operate within the United States and not be subject to full CFTC regulation as a domestic futures exchange. The CFTC invited and considered public comments on all of the criteria urged by Mr. Greenberger. The Policy Statement states that the Commission "decided not to adopt any objective standards establishing a threshold test of U.S. location. Commission staff will continue to assess the legitimacy of any particular applicant to seek relief as a 'foreign' board of trade by considering the totality of factors presented by an applicant. This flexible case-by-case approach will permit

staff, during a period of evolving market structure, to consider the unique combination of factual indicators of U.S. presence that may be presented by an applicant for relief."

---

16. STATEMENT (p.5): *"[T]he Dubai Mercantile Exchange, in affiliation with NYMEX, a U.S. exchange, has also commenced trading the U.S. delivered WTI contract on U.S. terminals, but is, by virtue of a CFTC no action letter, regulated by the Dubai Financial Service Authority."*

RESPONSE: This statement is incorrect. The Dubai Mercantile Exchange (DME) has not commenced trading crude oil contracts in the United States, although it has announced its intention to seek permission to establish DME trading terminals in the United States to trade this contract. Second, the DME is not considering trading a "U.S. delivered WTI contract," but rather a financially settled derivative contract whose price would be linked to the settlement price of the WTI contract traded on the NYMEX. The Dubai WTI–related contract would not require the physical delivery of any crude oil. Third, the trading of contracts on the DME will be regulated by the Dubai Financial Services Authority, not by virtue of any action or inaction by the CFTC, but rather by the operation of the law of Dubai, the jurisdiction in which the DME is located.

The issue is not whether the DME will regulate trading on an exchange located in its country, but whether the CFTC will be able to exercise oversight of DME contracts traded here in the United States. The CFTC has yet to grant DME permission to use trading terminals in the United States for the trading of its WTI contract and, prior to doing so, may follow the precedent set in the United Kingdom and require DME to provide daily trading data and apply speculative position limits to those contracts comparable to the reporting and trading requirements applicable to WTI-related contracts currently traded in the United States. Legislation has been introduced in the Senate, S. 2995 and S. 3129, that would require the CFTC to follow that course of action for every foreign exchange seeking to trade within the United States.

---

17. STATEMENT (p.12): *"S. 2995 . . . opens the door to any foreign exchange operating under an FBOT exemption escaping U.S. regulation for any U.S. delivered commodity . . . ."*

RESPONSE: This statement is incorrect. S. 2995 was introduced by Senators Levin and Feinstein in May. In June, a new provision was added to the bill and it was reintroduced as S. 3129, the Close the London Loophole Act sponsored by Senators Levin, Feinstein, Durbin, Dorgan, and Bingaman. There is nothing in either S. 2995 or S. 3129 that would "open the door" to any foreign board of trade "escaping U.S. regulation." To the contrary, both bills would make it *more* difficult for the CFTC to grant a no-action letter to a foreign exchange than under current CFTC practice. Both bills would require the CFTC, before granting or continuing permission for a foreign exchange to operate trading terminals within the United States, to make a specific finding that the foreign exchange has comparable transparency requirements and speculative positions limits to those in the United States. S. 3129 goes further and gives the CFTC explicit authority to: (1) prosecute U.S. persons who manipulate or attempt to manipulate the price of a commodity in interstate commerce through trading on a foreign exchange; (2) direct U.S. traders

to reduce their positions on a foreign exchange when those positions exceed the applicable position limits or accountability levels; and (3) impose recordkeeping requirements on U.S. traders trading on a foreign board of trade or exchange. Both bills would strengthen U.S. oversight of foreign exchanges operating trading terminals in the United States.

---

18. STATEMENT (p.13): *"S. 2995 does not incorporate all of the conditions within the present FBOT no action letter typically issued by CFTC staff."*

RESPONSE: S. 2995 and its successor bill S. 3129 do not limit the conditions that the CFTC may impose upon a foreign exchange in a no-action letter; both bills simply require that certain conditions be met before a foreign exchange is allowed to operate trading terminals within the United States. Nothing in either bill would restrict the conditions the CFTC may impose upon a foreign exchange to those specified in the bill language.

---

19 STATEMENT (p.8): *"The Senate Permanent Investigating Subcommittee has now issued two reports, one in June 2006 and one in June 2007, that make a very strong (if not irrefutable case) that trading on ICE has been used to manipulate or excessively speculate in U.S. delivered crude oil and natural gas contracts. The June 2006 report cited economists who then concluded that when a barrel of crude was @ $77 in June 2006, $20 to $30 dollars of that cost was due to excessive speculation and/or manipulation on unregulated exchanges."*

RESPONSE: The 2006 and 2007 PSI reports focused on the role of excessive speculation in U.S. commodity markets; neither report contained any findings on whether traders manipulated crude oil or natural gas prices.

Prepared Statement of Andrew Siegel

Vice President, When Pigs Fly, Inc.

May 7, 2008

Our bakery was started in 1993. Since then it has it has grown and changed dramatically. The Bakery has gone from a sole proprietorship baking 85 loaves per day and delivering to a handful of local stores and restaurants to where it is today. Delivering to over 250 grocery stores and supermarkets in Maine, New Hampshire, Massachusetts, and a small presence in Rhode Island , Connecticut, New Jersey and New York . The bakery also has established 5 company stores where we bake and deliver our fresh breads seven days a week and we have an online business where customers can order and have breads shipped anywhere in the country. We have about 50 employees who are full and part time This is an increase of 25% over last year.

As in any business there are lots of obstacles and hurdles to overcome. I think that when a business starts up the odds of it surviving 10 years is not very high. So when we look at the decisions to be made one of the factors that we take into consideration is what can and what can't we control.

We are very fortunate that the bread we bake is a product that consumers really like. The biggest challenges we face are not where to deliver our bread but how do we get it there and insure that the quality maintained as we grow the business.

So what hurdles has the bakery faced recently and what steps can we make to insure that we can continue to bake quality bread and deliver them to our customers at a reasonable price.

In the last 2 years we have seen some dramatic price increases in every part of our business. The cost of propane, electricity, gasoline, ingredients like honey, nuts, seeds, flour have had increases of 50 to 100% . We use about 50000 lbs of flour per week. If you relate that into costs

in September of 2007 it was about $7600 per week

In October of 2007 it increased to $9700 per week

in December it was $12400 per week that's when things started to get crazy there were rumors that there may not be enough of some kinds of flour to get through until the next crop. So from December until the end of February the price went as high as $28000 per week. Before reaching the $28000 level I purchased some at $22000. An increase of 189% just from September

So now the price is about $15000 per week 100% above the cost of flour in September but almost 50% lower than where it was at the end of February.

The factors involved as I understand it is corn being planted instead of wheat to make ethanol, China's economy growing and using more grains to feed livestock , The worst weather conditions making this the poorest wheat crop in decades and hedge funds

manipulating driving prices up in a bubble and causing us bakeries and the consumers to bear the costs.

So when the prices are racing to the sky literally by thousands of dollars per week. Our bakery and every other bakery has to purchase flour or go out of business. So now we have raised our prices. Customers are upset and our employees are feeling the pain due to no pay raises and increased costs of all their living expenses. I think that we will survive this crisis. My fear is that if all of the above mentioned factors continue that next year we will not be so lucky.

STATEMENT BEFORE THE U.S. SENATE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENT AFFAIRS

Hearing on Fuel Subsidies and Impact on Food Prices
Wednesday, May 7, 2008, 10:00 am

Bruce A. Babcock
Center for Agricultural and Rural Development
Iowa State University

Thank you, Mr. Chairman, for the opportunity to participate in today's hearing.

My research center has been intensely involved for the past three years in trying to understand both the short- and long-run impacts of expanded biofuels production in the U.S. and abroad. I would like to address the role that Federal policy plays in affecting the amount of biofuels that we produce and the impact these policies have on crop and food prices. Given that most attention has been paid to corn ethanol and not biodiesel, I will focus my testimony on ethanol.

Many people are confused about the impact of Federal ethanol policies. Much of this confusion stems from different questions being answered. For example, there is validity to the claim that the U.S. ethanol industry has caused the price of corn to double. This answer gives insight into the following question: What would happen to the price of corn if we were to eliminate the U.S. ethanol industry? But this answer does not give any insight into the central question relevant to today's hearing. Namely, what would happen to the price of corn if Federal biofuels policies were changed? We must recognize that U.S. ethanol plants will not disappear because of a change in U.S. ethanol policy. The plants will remain operating as long as they are covering their operating expenses. Thus, a change in U.S. policy will not cause corn prices to drop by half.

U.S. Biofuels Policies

There are three Federal policies that I want to examine. They are the Renewable Fuels Standard, the blenders' tax credit (Volumetric Ethanol Excise Tax Credit), and the tariff on imported ethanol. Changes in these three policy tools will have both short- and long-run impacts on the price and availability of ethanol, corn, and other agricultural products.

The blenders' tax credit increases gasoline blenders' ability and willingness to pay for ethanol. Currently the tax credit is set at $0.51 per gallon. The effect of the tax credit is to increase the market price of ethanol, thereby increasing the profitability of ethanol production, which in turn increases the volume of ethanol, the amount of corn processed, the price of corn, and the volume of ethanol byproducts. Over the long run the blenders' tax credit has had a large effect on the size of the ethanol industry. The short-run impacts of the tax credit are modest because in the short run, the number of ethanol plants in existence is fixed.

The import tariff taxes imported ethanol. Hence, it decreases the attractiveness of exporting ethanol to the U.S. market because the net price received for U.S. sales is the U.S. market price for ethanol minus the tariff minus shipping costs. Currently, the tariff consists of a 2.5% sales tax plus a tax of $0.54 per gallon. The effect of the tariff is to drive a wedge between Brazilian ethanol prices and the U.S. price. If you reduce the tariff, more Brazilian ethanol would flow to the U.S. market, thereby reducing today's large price difference.

The Renewable Fuels Standard in the Energy Independence and Security Act (EISA) specifies minimum biofuels consumption levels for the United States. In 2008, mandates total 9 billion gallons. In 2009 the mandate increases to 10.5 billion gallons. The short-run effect of a mandate is zero if biofuels consumption is greater than mandated levels. That is, removing a non-binding mandate would have no effect. In the long run, the EISA mandates have created a strong expectation that biofuels production will expand to at least the levels dictated by the mandates. This expectation for robustly growing future demand for corn has increased the futures price of corn in 2010 and 2011, which has likely had some effect on the price of corn today.

Direct Impacts on Ethanol and Corn from U.S. Policies

It is important to separately evaluate the near-term impacts of Federal policy from long-term impacts. Given the level of concern about current crop prices, I want to examine the short-term impacts first. To give us a good grasp of the magnitudes of the effects, I will cite some results from a model I developed jointly with my graduate student, Lihong Lu McPhail, that looks at what would happen to the supply of ethanol and the market price of corn during the period September 1, 2008 to August 31, 2009, which is the reporting period for how the 2008 corn and soybean crops are sold. A focus on corn is warranted because it is the crop most directly affected by U.S. biofuels policies and it is the crop that most determines the impacts on the cost of food because of its importance in determining the cost of feeding livestock.

Taking into account that we cannot know for certain how many ethanol plants will be ready to produce ethanol next year, what the size of this year's corn crop will be, what the price of crude oil will be, and how much corn and other crops will be produced in other countries, we estimate that under current Federal biofuels policies, expected ethanol production is about 10.8 billion gallons, the expected price of ethanol is $2.44 per gallon, and the expected price of corn is $5.68 per bushel. We then asked the following question: What would happen to ethanol prices and volume and the price of corn next year if Federal policies were changed? We considered a number of different scenarios, but I want to focus on three today. These are 1) eliminate EISA mandates, but keep the tax credit and the import tariff; 2) eliminate the import tariff and the blenders' credit, but keep the mandate; and 3) eliminate all three Federal instruments. Our findings are presented in Table 1.

Because the blenders' tax credit and mandate both serve to increase the demand for ethanol, elimination of only one of these policies would have little impact. Elimination

of the mandate would reduce expected ethanol production by about 4%, the ethanol price would drop by less than 2%, imports would fall by 18%, and the price of corn would fall by slightly more than 1%. Maintenance of the $0.51 tax credit keeps demand for ethanol high, and the import tariff keeps imports down. The impacts of removing only the $0.51 blenders' tax credit would be similarly small, because the mandate would keep ethanol demand high and the import tariff would ensure that the mandate is met with domestically produced ethanol.

Elimination of the blenders' tax credit and the import tariff would have larger impacts because increased imports would reduce the amount of domestic ethanol that would be needed to meet the mandate. However, the supply of ethanol from Brazil is not limitless. We estimate that imports would more than double with elimination of the tax credit and import tariff, domestic ethanol production would decline by about 11%, and the price of corn would drop by 7%. The price of ethanol would drop by 13%. The price of blended fuel would not drop because decreased ethanol production would allow gasoline prices to increase. The impacts are not larger because the mandates keep total ethanol demand high and the existence of constructed U.S. ethanol plants keeps total corn demand high.

A rollback of all ethanol incentives and protection would have larger impacts. Ethanol production would drop by 21%. A drop of this magnitude in production would normally be expected to increase price. But the price for ethanol is enhanced by the tax credit and mandate under current policy so this drop in production would be accompanied by an 18% drop in the ethanol price. Imports would increase modestly because the decline in the tax credit is less than the decline in the import tariff. The expected corn price would drop by almost 13%, to just below $5.00 per bushel.

The livestock industry and its supporters have been most vocal in their calls for a rethinking of Federal ethanol policy. But high gasoline prices combined with existing ethanol plants means that corn prices in the near term will remain well above historical levels even if the mandate, the blenders' tax credit, and the import tariff were all eliminated. This is not to say, however, that the 13% drop in corn prices would not affect livestock margins and, eventually, food prices. This drop in corn prices would reduce the cost of feeding beef cattle by 5% of revenue, hogs by 7% of revenue, laying eggs by 4%, and dairy cattle by 3% of revenue. This drop in production costs would eventually translate into consumer prices that would be lower than they otherwise would be.

The longer-term impacts of a change in Federal biofuels policy depends crucially on the price of crude oil and on the number of ethanol plants that get constructed under current incentives. For example, if we were to eliminate all Federal biofuels policies today, and future crude oil prices support wholesale gasoline prices of $3.00 per gallon in the future, then ethanol production over the next five years or so would eventually increase to around 14 billion gallons, ethanol prices would be $2.00 per gallon, and corn prices would be about $4.00 per bushel. A return of wholesale gasoline prices to $2.00 per gallon would result in ethanol production of about 10 billion gallons, an ethanol price of about $1.60 per gallon, and corn prices would fall to approximately $3.60 per bushel. In

contrast, sustained $4.00 gasoline prices would result in $2.40 ethanol, $5.00 corn, and 21 billion gallons of ethanol.

These results reveal two general findings. First, agricultural commodity prices and gasoline prices are now inextricably linked through existing ethanol plants and the knowledge of how to efficiently convert corn to transportation fuels. This means that for the foreseeable future, even if we were to eliminate all support for corn ethanol, the price of corn and crops that compete with corn for land will rise or fall directly with transportation fuel prices. Second, in the long run, if high gasoline prices signal that we need alternative fuels, the corn ethanol industry will be there to contribute substantial amounts of transportation fuels even without government subsidies. As in any unsubsidized market, the amount that corn ethanol would contribute would depend on the relative competitiveness of the industry.

Impacts on Other Commodities and Food

The need for more corn to meet both the demands of the corn ethanol industry as well as food and feed demand means that fewer acres of other crops will be planted as corn acreage is expanded. The drop in U.S. acreage of other crops will cause their prices to increase. The most direct competitor to corn for land is soybeans. We have seen how this competition can have dramatic impacts on both corn and soybean prices as users of both commodities offer higher prices to ensure adequate supplies of "their" crop. The impact on crops other than soybeans is less pronounced because corn competes less directly for land. Wheat acreage will be influenced to some degree by corn prices because of land competition with soybeans and, in some regions, corn. U.S. rice acreage will be largely unaffected by corn prices because corn and rice are grown in different regions and it takes a fairly large incentive to move rice producers away from rice. The direct link that many people have made between U.S. biofuels subsidies and rice prices is, therefore, extremely difficult to find or defend.

With regards to food prices we must remember that, to a large extent, Americans do not eat agricultural commodities. Rather we eat food manufactured from commodities. Wheat gets combined with labor, energy, and other ingredients into bread and pasta. Corn and soybean meal gets similarly transformed into meat, eggs, milk, and cheese. My colleagues and I estimated that a 30% change in the price of corn, along with corresponding changes in the prices of other crops, would change home food expenditures by about 1.3%. This estimate could be on the low side because we did not account for indirect changes in prices caused by competition for land for fruit, vegetables, and minor crops.

As shown in the table of short-run results, altering U.S. biofuels policies will change the price of corn by much less than 30%. This suggests that changes in biofuels policies will not dramatically affect the price that Americans will pay for food.

Commodity prices make up a much larger share of the consumer food dollar in many poor countries. Thus any change in commodity prices brought about by a change in U.S.

biofuels policies would have a much larger impact on food prices than in the United States and other rich countries.

Some may find these estimates of the effect on U.S. food prices not credible because of the huge run-up in wheat, rice, and feed costs over the last 18 months. But again, I have not tried to determine the impact on food costs from increasing agricultural commodity prices. Rather I am asking what the impact would be on commodity prices from a change in Federal biofuels policies given that we are well on our way to having more than 11 billion gallons of plant capacity and that markets expect high gasoline prices for the foreseeable future. This combination of in-place capacity and high-priced gasoline implies modest impacts of a change in policy.

Impacts on International Markets

Finally, I would like to include a few comments about international markets. The United States is a major exporter of corn, soybeans, wheat, and rice. Changes in U.S. supply and demand directly impact international prices. Thus, to the extent that changes in Federal biofuels policies affect U.S. prices, international markets would be similarly affected. Again, corn and soybean prices would be most affected by a change in Federal policy. Wheat prices would be affected less. Rice prices would be largely unaffected for two reasons. First, the U.S. share of world rice exports is lower than for corn, soybeans, and wheat, and second, rice acreage does not compete as directly for corn acres as do soybeans and wheat.

In conclusion, there is no doubt that the growth of the ethanol industry is an important factor in the run-up in agricultural commodity prices. But this does not imply that a change in Federal policy would reverse this growth. My testimony about the long-term impacts on the price of corn and related commodities is based on simple arithmetic: existing ethanol plants will operate at nearly full capacity if they can cover their operating costs; under-construction plants will get finished if it makes financial sense to finish them; and new plants will be constructed if market prices dictate. Thus, unless we have a return to $40 or $50 crude oil, we can expect the price of corn to be well above historical levels for the foreseeable future even if all support for corn ethanol were eliminated.

Table 1. Impacts of Federal Biofuels Policies Over the Period Sept 1, 2008 to August 31, 2009

Policy Scenario	U.S. Ethanol Production (billion gallons)	Ethanol Price ($/gallon)	Ethanol Imports (billion gallons)	Corn Price ($/bu)	Blended Fuel Price ($/gallon)
Mandate, Tax Credit and Tariff	10.8	2.44	0.5	5.68	2.72
Tax Credit and Tariff	10.4	2.40	0.4	5.61	2.73
Mandate Only	9.6	2.12	1.0	5.29	2.73
No Programs	8.6	2.01	0.7	4.97	2.76

Policy Scenario	Ethanol Production	Ethanol Price	Ethanol Imports	Corn Price	Blended Fuel Price
		change from current policy			
Tax Credit and Tariff	-4%	-1.5%	-18%	-1.2%	0.3%
Mandate Only	-11%	-12.9%	110%	-6.8%	0.2%
No Programs	-21%	-17.5%	55%	-12.5%	1.2%

TESTIMONY OF REV. DAVID BECKMANN,

PRESIDENT OF BREAD FOR THE WORLD

Senator Lieberman, Senator Collins, and other distinguished members of the Homeland Security and Governmental Affairs Committee, I appreciate the opportunity to appear before you today to discuss the global hunger crisis, rising food prices and the impact of corn ethanol subsidies on poor and hungry people. Biofuels policy is a new issue Bread for the World and we find ourselves grappling with the same questions that you are seeking to answer today. I commend you for taking on this issue. While internationally this impact seems more direct, domestically it is less so for most of the food purchased.

Globally, food prices have almost doubled over the last three years, and the futures for basic commodities – wheat, corn, and soybeans – have jumped up by two-thirds in the last 12 months. Since poor people in developing countries spend the bulk of their income on basic commodities, world hunger has increased significantly. High food prices have incited riots and other social unrest in about thirty countries. This makes the issue of solving the world's hunger crisis not just vital for those in need but also important for the political stability of the world.

However, measuring the role that subsidies for corn-based ethanol play in increasing domestic hunger is more nuanced and requires a more thoughtful discussion. Diverting corn from feed for livestock to ethanol has been controversial from the start. The economic arguments were not solid, the environmental benefits not realistic, and the ability to move our nation away from fossil fuels simplistic. On the other hand, these efforts are helping rural communities that are hard-pressed economically. There is not an easy answer.

Why are commodity prices going up and how does this increase translate into higher food prices?

Several factors contribute to higher commodity prices. Higher input costs like rising fuel prices contribute to an overall increase in commodity prices by making it more expensive to produce, transport and distribute. There are also issues related to causes as simple as supply and demand. Rising standards of living in countries like India and China have allowed people there to afford more nutritious and diverse foods, increasing the demand for meat and dairy products, which in turn depend on grain. Droughts in several parts of the world reduced the wheat crop in 2007, leading to an increase in wheat prices as demand outpaced supply. Drought in Australia has reduced that country's rice production by 98 percent in just six years.

And, in response to subsidies and mandates, farmers are diverting crops and land used for food to corn for ethanol. This puts pressure on the amount of corn available for food and drives up the price of corn. It also puts pressure on other crops as farmers shift soybeans, wheat and even cotton acres into corn to take advantage of higher prices. How much of the run-up in food prices is attributable to fuel mandates is a question on which reasonable people disagree. Modeling done by the International Food Policy Research Institute puts the effect at between 25 and 30 percent. The United Nations' Food and Agriculture Organization puts the impact at 10 to 15 percent, while the Bush administration reported at a May 1 press briefing that the impact of increased ethanol on global food prices is only 2 to 3 percent.

Domestically, as commodity prices go up, food prices follow, but to a much lesser extent then they do internationally. On average, about 20 cents of each dollar spent on food in this country comes from farm costs – the rest of the cost comes as the product travels from the farm to the grocery store shelf. Most of the retail price comes from packaging, processing, transportation, advertising, and profit.

The more processed a food is, the less its retail price is affected by changes in the original commodity price. Take for example a highly processed food like breakfast cereal. An 18-ounce box of corn flakes contains about 12.9 ounces of milled corn. A 50-percent increase in corn prices, similar to what we have seen in recent years, would raise the price of corn flakes by about 1.6 cents, or 0.5 percent. By contrast, foods that require little processing are more susceptible to commodity price fluctuations. In 2007 the price of milk rose 11.6 percent and the price of eggs jumped 29.2 percent.

How are rising food prices contributing to domestic hunger?

Most families can shift spending from other parts of their budget to enable them to spend more on food. But low-income households have less flexibility. Food accounts for 17.1 percent of income for households making less than $10,000 per year compared to the U.S. average of 12.6 percent.

While rising food costs are placing additional strain on family budgets, they are part of a long list of increases in the cost of basic needs, such as housing, childcare, healthcare and fuel, which, compounded by the decrease in income from stagnant wages and higher unemployment, have no doubt increased both poverty and hunger in our country.

It's clear that food prices have gone up as have many of the most basic goods and services purchased by low-income families. The increase in expenses will require a response that mitigates these costs in the short term and strengthens a family's economic stability and capacity to respond to financial fluctuations in the long term. While I look forward to working with you on developing the second phase of this strategy, there should be no delay implementing the first: providing immediate relief for these families by strengthening our food assistance programs.

What is the impact of increasing food prices on our national nutrition programs?

Our nutrition assistance programs, including the Food Stamp Program, WIC, and The Emergency Food Assistance Program, or TEFAP (which provides funding to our nation's food banks), are strong tools for combating domestic hunger. Rising food prices place a strain on nutrition programs by increasing both the number of people seeking assistance and the cost of operating the program, making it harder for our nutritional safety net to function.

Enrollment in the Food Stamp Program jumped considerably in the last year, in part because of higher food prices. In January 2008, the number of households participating in the Food Stamp Program was up 5.6 percent from January 2007. Participation in other programs is expected to rise as well. When food costs go up, the purchasing power of the monthly food stamp benefit is diminished – families can buy less food with the benefit they are given. The average food stamp benefit is a meager $1 per person per meal. In 2006, USDA found that 90% of benefits were

used up by the third week of the month. But with food prices now much higher, that meager benefit is used up all the sooner.

While the Food Stamp Program is structured so that all who are eligible will be served, other programs can only serve a limited number of people. The number of women and young children who can be served each year by the WIC program depends on the annual appropriation and the cost of operating the program. When program costs go up because of higher food prices, either Congress must provide additional funding or families have to be cut from the program. If food prices continue to rise at their current rate, mothers and children will be cut from the program. Given the importance of proper nutrition for physical and cognitive development in the first few years of life, we must not let this happen.

Food banks traditionally help fill gaps in our safety-net by providing short-term, emergency food assistance. But higher operating costs from food and fuel limit the number of people food banks can serve, even at a time of higher need. Food banks estimate a 20 percent increase in requests for help. The annual TEFAP appropriation has not increased since 2003, despite the fact that the cost of food at home has gone up 18 percent since January 2003. And bonus commodities (provided through the government purchase of surplus commodities that farmers are unable to sell on the open market) have dwindled from about $250 million in 2003 to $58 million last year because of high commodity prices.

How can we help hungry people withstand higher food prices?

In the short term, Congress must provide immediate assistance through a second stimulus package to allow nutrition programs to meet increasing need and help to alleviate higher food costs. The stimulus should provide an immediate boost in food stamp benefit levels to help families meet today's actual food prices, additional WIC funding to ensure that all eligible women and children continue to receive benefits, and additional funding for TEFAP so that food banks can help families weather higher food prices.

Over the medium- and long-term, we need to develop a more dynamic, economically-efficient global agriculture to bring food prices down again. Currently, we have a nation-by-nation, highly managed, protectionist global agricultural system. Many developing countries have responded to higher food prices by limiting the export of food -- which has aggravated the problem. But the United States will be in no position to provide leadership in developing a more responsive, economically efficient global agriculture until Congress passes a farm bill that clearly signals a new direction. The United States is wasting billions of dollars on subsidies to well-off landowners. These subsidies often frustrate agricultural production in developing countries, which is especially important to hungry people around the world. Changing the commodity payment system would also free up money to better support struggling farm and rural families of modest means in this country while providing help to low-income Americans caught between a weak economy and rising food prices.

I applaud President Bush for persisting in his demands for a farm bill that makes true reforms to our commodity programs by tightening limits on federal farm payments to wealthy individuals; eliminating the beneficial interest provision of the marketing loan program that allows farmers to sell crops above the support price

and still collect a subsidy; and working to bring us into compliance with international trade treaties.

A reformed farm bill would also strengthen nutrition programs for hungry and poor people. I was pleased to see last week that the farm bill conference committee had included an additional $10.361 billion in investments in the nutrition title. Nearly 28 million Americans now receive food stamps, the highest since the program began in the 1960s. The number is likely to rise further. This increase in funding will provide essential food assistance through the Food Stamp Program and local food banks.

In addition to making changes through the farm bill, Congress must also wrestle with new information on the impact of our energy policies on hunger and the needs of poor people internationally. In light of the current hunger crisis, Congress must reexamine the policies that spur the conversion of food into fuel. The impact of corn-based ethanol on world hunger is especially clear.

At the same time, Congress must also look for ways to ensure that the progress realized by rural communities during the ethanol boom is not undone. Many rural communities have withered under the loss of its population and economic base; agriculture in the U.S. has become increasingly consolidated and mechanized; and manufacturing plants have relocated to follow lower cost labor. Ethanol plants have brought renewed vitality to many rural communities.

These are not easy issues. But today's hearing is an opportunity to begin the discussion and find a new direction. I applaud you for taking this first step.

Thank you.

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
sustainable solutions for ending hunger and poverty

2033 K Street, NW
Washington, DC 20006-1002 USA
Tel: +1.202.862.5600
Fax: +1.202.467.4439
Email: ifpri@cgiar.org
www.ifpri.org

Biofuels and Grain Prices: Impacts and Policy Responses

Mark W. Rosegrant
Director, Environment and Production Technology Division
International Food Policy Research Institute
May 5, 2008

Background
Recent dramatic increases in food prices are having severe consequences for poor countries and poor people. The Food and Agriculture Organization of the United Nations (FAO) reports that food prices rose by nearly 40 percent in 2007 and made further large jumps in early 2008. Nearly all agricultural commodities—including rice, maize, wheat, meat, dairy products, soybeans, palm oil, and cassava—are affected. In response to the price hikes, food riots have occurred in many developing countries, including Burkina Faso, Cameroon, Côte d'Ivoire, Egypt, Haiti, Indonesia, Senegal, and Somalia. According to the FAO, 37 countries are now facing food crises.

Triggers and Underlying Factors
High food-price triggers have included biofuel policies, which have led to large volumes of food crops being shifted into bioethanol and biodiesel production; bad weather in key production areas, such as droughts in wheat-producing Australia and Ukraine; and higher oil prices, which have contributed to increased costs of production inputs and transportation. Prices then spiraled further as a result of poor government policies such as export bans and import subsidies, combined with speculative trading and storage behavior in reaction to these policies.

However, the preconditions for rapidly rising food prices stem from underlying long-term trends in food supply and demand that have contributed to a tightening of global food markets during the past decade. Rapid growth in demand for meat and milk in most of the developing world put strong demand pressure on maize and other coarse grains as feed, and small maize price increases had been projected for some time as a result. Other underlying factors include stronger economic growth in Sub-Saharan Africa since the late 1990s, which has increased the demand for wheat and rice in the region; and rapid income growth and urbanization in developing Asia, which has led to increased demand for wheat, meat, milk, oils, and vegetables. On the supply side, long-term underlying factors include underinvestment in agricultural research and technology and rural infrastructure, especially irrigation, as well as increasing pressure on the natural-resource base (land and water).

The Role of Biofuels in Food Price Increases
The role of biofuel policies in the food-price hikes has become particularly controversial. The rapid increase in demand for and production of biofuels, particularly bioethanol from maize and sugarcane, has had a number of effects on grain supply-and-demand systems. Expanded production of ethanol from maize, in particular, has increased total demand for maize and shifted land area away from production of maize for food and feed, stimulating increased prices for maize. Rising maize prices, in turn, have affected other grains. On the demand side, higher prices

for maize have caused food consumers to shift from maize (which is still a significant staple food crop in much of the developing world) to rice and wheat. On the supply side, higher maize prices made maize more profitable to grow, causing some farmers to shift from rice and wheat (and other crop) cultivation to maize cultivation. These demand- and supply-side effects have tended to increase the price of rice and wheat and other crops.

To examine the impact of alternatives to current biofuel demands, the following analyses were implemented:

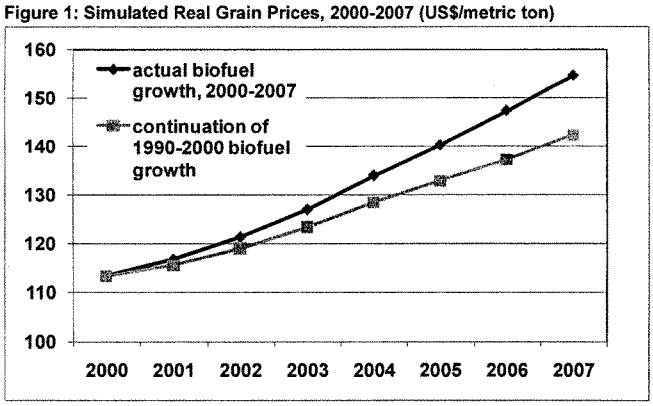
1) Recent food price evolution with and without high biofuel demand
2) Impact of a freeze on biofuel production from all crops at 2007 levels
3) Impact of a moratorium (elimination) on biofuel production after 2007.

These issues are examined using the International Food Policy Research Institute's (IFPRI) IMPACT model (International Model for Policy Analysis of Agricultural Commodities and Trade), a partial-equilibrium modeling framework that captures the interactions among agricultural commodity supply, demand, and trade for 115 countries and the world. IMPACT includes demand for food, feed, biofuel feedstock, and other uses.

1) Recent food price evolution with and without high biofuel demand

A comparison between a simulation of actual demand for food crops as biofuel feedstock through 2007 and a scenario simulating biofuel growth at the rate of 1990-2000 before the rapid takeoff in demand for bioethanol approximates the contribution of biofuel demand to increases in grain prices from 2000 to 2007. The percentage contribution of biofuel demand to price increases during that period is the difference between 2007 prices in the two scenarios, divided by the increase in prices in the baseline from 2000 to 2007. The increased biofuel demand during the period, compared with previous historical rates of growth, is estimated to have accounted for 30 percent of the increase in weighted average grain prices. Unsurprisingly, the biggest impact was on maize prices, for which increased biofuel demand is estimated to account for 39 percent of the increase in real prices. Increased biofuel demand is estimated to account for 21 percent of the increase in rice prices and 22 percent of the rise in wheat prices.

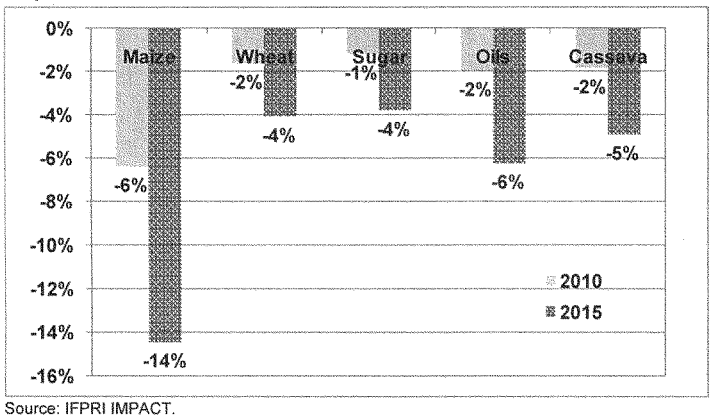
Figure 1: Simulated Real Grain Prices, 2000-2007 (US$/metric ton)



Note: Grain price is the production-weighted average of rice, wheat, maize, and other coarse grains.
Source: IFPRI IMPACT.

2) Impact of a freeze on biofuel production at 2007 levels
If biofuel production was frozen at 2007 levels for all countries and for all crops used as feedstock, maize prices are projected to decline by 6 percent by 2010 and 14 percent by 2015. Smaller price reductions are also expected for oil crops, cassava, wheat, and sugar.

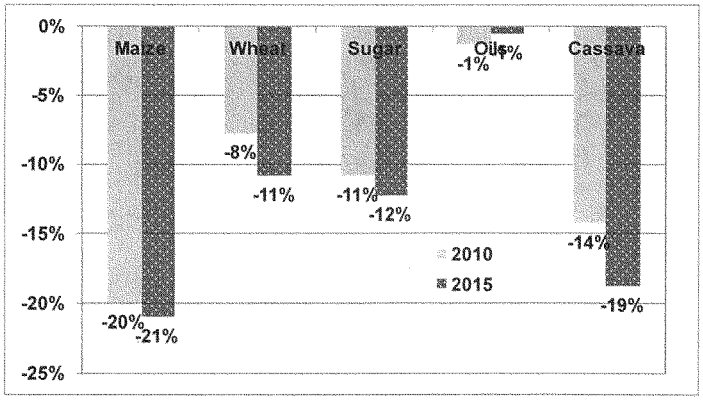
Figure 2: Change in Selected Crop Prices if Biofuel Demand for all Crops was Fixed at 2007 Levels



Source: IFPRI IMPACT.

3) Impact of a moratorium (elimination) on biofuel production after 2007
If biofuel demand from food crops were abolished after 2007 (in other words, if a global moratorium on crop-based biofuel production were imposed), prices of key food crops would drop more significantly—by 20 percent for maize, 14 percent for cassava, 11 percent for sugar, and 8 percent for wheat by 2010.

Figure 3: Change in Selected Crop Prices if Biofuel Demand is Eliminated after 2007



Source: IFPRI IMPACT.

Conclusion

Various pressures on international grain markets have contributed to the rapid price increases during the past several years, and biofuels have been just one contributor—albeit a major one. Slowing supply growth and rapidly growing demand for grain for all uses (including food and feed), which have been made worse by policy-induced distortions, are long-term underlying factors that cannot easily be reserved. If the world food economy is to meet the increased demand for food, feed, and fuel that is being driven by rapid socioeconomic growth in the world's biggest and fastest-growing developing countries, and also cope with the future challenges of increasing land-use pressures and climatic change, agricultural productivity will have to grow significantly faster in the future than it has in recent years.

Higher food prices reduce the poor's access to food, which has possible long-term, irreversible consequences for health, productivity, and well-being—particularly if higher prices lead to reduced food consumption by infants and preschool children. If the current biofuel expansion continues, calorie availability in developing countries is expected to grow more slowly; and the number of malnourished children is projected to increase, even though agricultural value added in these regions would also accelerate as a result of higher farm incomes.

It is therefore important to find ways to keep biofuels from worsening the food-price crisis, and a reduction in mandates and elimination of subsidies for biofuel production would contribute to lower food prices. But it is even more critical to focus on increasing agricultural productivity growth and improving developing-country policies and infrastructure related to the storage, distribution, and marketing of food. These factors will continue to drive the future health of the agricultural sector and will play the largest role in determining the food security and human well-being of the world's poorer and more vulnerable populations.

The United States can play an essential role in boosting agricultural growth by increasing investment in agricultural research and supporting reforms targeted at increased crop productivity on a global basis. The 15 international research centers of Consultative Group on International Agricultural Research (CGIAR, www.cgiar.org) have been at the forefront of increasing agricultural productivity in the developing world, with a focus on achieving sustainable food security and reducing poverty in developing countries through scientific research and research-related activities in the fields of agriculture, forestry, fisheries, policy, and the environment. Providing more support to the CGIAR system should be an important part of U.S. efforts to redress the current food crisis.

Commodity Futures Trading Commission
Office of External Affairs
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581
202.418.5080

Testimony

Written Testimony of Jeffrey Harris, Chief Economist Before the Senate Committee on Homeland Security and Governmental Affairs

United States Senate

May 20, 2008

Thank you, Mr. Chairman and members of the Committee. I am Jeffrey Harris, Chief Economist of the Commodity Futures Trading Commission (CFTC or Commission), testifying along with my colleague John Fenton, Director of Market Surveillance. We appreciate the opportunity to discuss the CFTC's role with respect to the agriculture commodities markets and our view of current trends in the markets as the government regulator charged with overseeing them.

CFTC Mission

Congress created the CFTC in 1974 as an independent agency with the mandate to regulate commodity futures and option markets in the United States. Broadly stated, the CFTC's mission is two-fold: to protect the public and market users from manipulation, fraud, and abusive practices; and to ensure open, competitive and financially sound markets for commodity futures and options.

These markets play a critical role in the U.S. economy by providing risk management tools that producers, distributors, and commercial users of commodities use to protect themselves from unpredictable price changes. The futures markets are also designed to discover prices that accurately reflect information on supply, demand, and other factors.

Overview of Current Trends in the Futures Markets

These are extraordinary times for our markets: many commodity futures prices have hit unprecedented levels. In the last three months, the agricultural staples of wheat, corn, soybeans, rice and oats have hit all-time highs – as you can see in Chart 1.

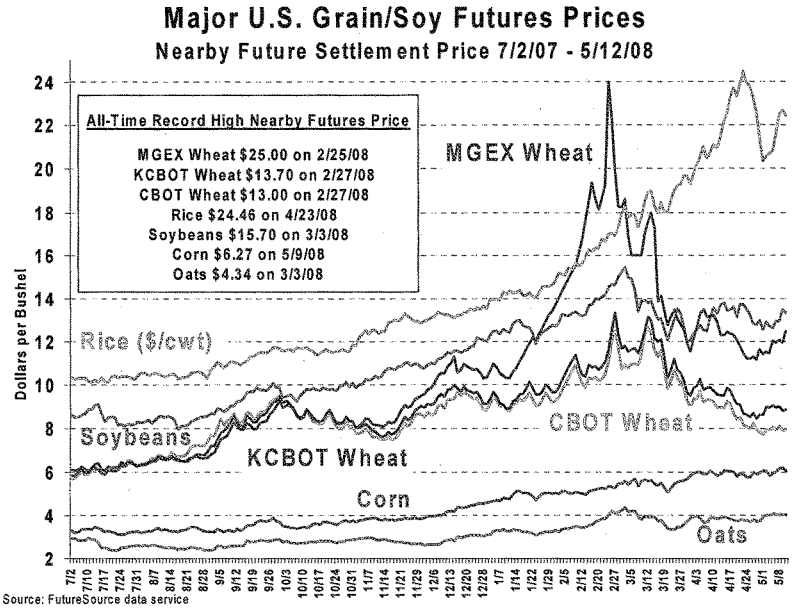


Chart 1: Major U.S. Grain and Soy Futures Prices

We are also witnessing record prices in crude oil, gasoline and other related energy products. Both macro- and micro-economic factors are at work in these prices. Broadly speaking, the weak dollar, strong demand from the emerging world economies, geopolitical tensions in oil-producing regions, supply disruptions, unfavorable weather, and increased production of ethanol have contributed to driving up many commodity futures prices.

Adding to these trends, the emergence of the sub-prime crisis last summer and weak returns in equity and debt markets have led investors increasingly to seek portfolio exposure in commodities as an asset class. As the federal regulator of the futures markets, the CFTC is working to ensure that they are working properly for producers, dealers, processors, consumers and investors. To date, CFTC staff economic analysis indicates that broad-based manipulative forces are not driving the recent higher futures

prices in commodities across-the-board. That said, we continue to gather information from the entire marketplace and welcome outside analysis and perspectives so that we can ensure that our view of these markets is complete and accurate. We are continually doing new analysis of our detailed market data, applying new research methods, and building bridges with outside researchers and government experts all to increase our view of the futures markets. And separately, our Division of Enforcement investigates any specific instances of potentially manipulative conduct on a case-by-case basis.

In line with these efforts, the agency convened an agriculture forum three weeks ago in which we brought together a diverse group of market participants for a full airing of views and opinions on the driving forces in these markets. For those unable to attend, the agency allowed a two week period after the forum for public comment, which closed last Wednesday. Currently, the Commissioners and staff are reviewing the comments we received, and the Commission plans to announce several initiatives in the near future. We are working closely with market participants to address concerns aired around this forum to ensure the markets are functioning properly.

The CFTC also recently announced the creation of an Energy Markets Advisory Committee and named the public members of the Committee two weeks ago. Our first meeting of that group is scheduled for June 10th to look at issues related to the energy markets and the CFTC's role in these markets under the Commodity Exchange Act (CEA). These public forums will enhance our ability to make informed decisions as we strive to improve our oversight of these important markets.

Using Data to Oversee the Markets and to Enforce the CEA

The CFTC receives a tremendous amount of data every day about market fundamentals, futures trading activity, and, most importantly, confidential data about traders participating in the markets. The agency's Large-Trader Reporting System is the cornerstone of our surveillance system. Under that system, clearing members, futures commission merchants (FCMs), foreign brokers, and individual traders file confidential reports with the CFTC each day, reporting positions and identifying each large trader in each designated contract market (DCM). For example, in the NYMEX WTI crude oil futures contract a trader with a position exceeding 350 contracts in any single expiration is "reportable." Large-trader positions reported to the CFTC consistently represent more than 90% of total open interest in the NYMEX WTI contract, with the remaining traders carrying smaller positions.

When a reportable trader is identified to the CFTC, the trader is classified either as a "commercial" or "non-commercial" trader. A trader's reported futures position is determined to be commercial if the trader uses futures contracts for the purposes of hedging as defined by CFTC regulations. Specifically, a reportable trader gets classified as commercial by filing a statement with the CFTC (using the CFTC Form 40) that it is commercially "...engaged in business activities hedged by the use of the

futures and option markets." To ensure that traders are classified consistently and with utmost accuracy, CFTC market surveillance staff reviews the forms and re-classifies the trader if it has further information about the trader's involvement with the markets.

In addition to identifying commercial and non-commercial traders, the large-trader data can be filtered by type of trading activity. For example, on the commercial side, the CFTC can sort the data by more than 20 types of trading entities, ranging from agricultural merchants and livestock feeders to mortgage originators. Traders that are non-commercial include hedge funds, commodity trading advisors, commodity pool operators (managed money traders), and floor brokers and traders.

Using data from the Large Trader Reporting System, the CFTC publishes a weekly breakdown of reportable positions of each Tuesday's open interest. This well-known public report is called the Commitments of Traders (COT) report. COT reports are published each Friday afternoon for markets in which 20 or more traders hold positions above CFTC-established reporting levels. For reportable positions, the report shows commercial and non-commercial holdings, changes from the previous report, percentage of open interest by category, the concentration of positions held by the largest four and eight traders, and the numbers of traders in each category.

To complement the extensive surveillance program, the CFTC's strong enforcement program has been working hard to punish wrongdoers and to keep manipulators out of the markets. During the last five years, Enforcement has maintained a record level of investigations and prosecutions in nearly all market areas, including manipulation, attempted manipulation, squeezes and corners, false reporting, hedge fund fraud, off-exchange foreign currency fraud, brokerage compliance and supervisory violations, wash trading, trade practice misconduct, and registration issues. Enforcement also routinely assists in related criminal prosecutions by domestic and international law enforcement bodies. Through those efforts, during the past five years (April 2003 – March 2008), the CFTC has assessed more than $2 billion in monetary sanctions, which include civil monetary penalties and orders to pay restitution and disgorgement.

Speculation in the Commodities Markets

The current market environment raises questions about the role that speculators play in affecting prices in the futures markets, questions that CFTC staff can address by analyzing large trader data. The proper and efficient functioning of the futures markets requires both speculators and hedgers. Overly restrictive limitations on the number of speculative positions held by individuals or entities could impair market liquidity, which in turn makes hedging more costly and less effective. In the absence of reasonable hedging opportunities, commercial businesses may be forced to increase prices to compensate for unhedged risk. Diminished hedging activity can also impair price discovery in futures markets since commercial hedgers typically are a primary source for new market information. Diminishing the ability of futures markets to serve their hedging and price discovery functions would likely have negative consequences for

commerce in commodities and ultimately, for the nation's economy.

Of course, excessive speculation can be detrimental to the markets. Under Section 4a of the CEA, the concept of "excessive speculation" is based on trading that results in "sudden or unreasonable fluctuations or unwarranted changes in the price" of commodities underlying futures transactions. The CEA does not make excessive speculation a *per se* violation of the Act, but rather, requires the Commission to enact regulations to address such trading (for example, through speculative position limits).

The Commission has utilized its authority to set limits on the amount of speculative trading that may occur or speculative positions that may be held in contracts for future delivery in agricultural markets. The speculative position limit is the maximum position, either net long or net short, in one commodity future (or option), or in all futures (or options) of one commodity combined, that may be held or controlled by one person (other than a person eligible for a hedge exemption) as prescribed by a DCM and/or by the Commission.

All agricultural futures and options contracts are subject to either Commission or exchange spot-month speculative position limits. With respect to trading outside the spot month, the Commission typically does not require speculative position limits. Under the Commission's guidance, a DCM (which is a regulated futures exchange) may replace position limits with position accountability for these contracts. With accountability rules, once a trader – whether speculating or hedging – reaches a preset accountability level, the trader must provide information about the position upon request by the exchange and the exchange has the authority to restrict a trader from increasing his or her position.

To achieve the purposes of the speculative position limits, the Commission and the exchanges will combine multiple positions in a contract when they are commonly owned or controlled by a single trader. These provisions apply to accounts having a 10 percent or greater financial interest by a single entity. Violators of speculative limits are subject to disciplinary action. The Commission, or an exchange, may institute discipline depending on the circumstances.

Impact of Institutional Investors

Clearly, the commodity futures markets are experiencing robust growth across commodities, particularly with the recent influx of institutional investors. There is no question that investors and consumers are diversifying their portfolios and seeking exposure to the commodity markets. At the CFTC's recent agricultural forum, managers of pension fund money testified about their increased participation in commodity markets, explaining that commodity exposure substantially reduces portfolio risk when combined with equity and/or debt investments. At the forum, Doug Hepworth of Gresham Investment Management LLC described the benefit as follows: Starting with a portfolio consisting of 40% debt and 60% equities, a five percent commodity exposure was added. The performance of that portfolio was tracked for 196 rolling five-

year periods beginning in 1987. On average, portfolio volatility was reduced by 10% by diversifying into commodities.

The arrival of these newer participants has, in some instances, coincided with observed price increases. Perhaps naturally, some have concluded that a portion of the high prices in agricultural and energy futures markets is related to the impact of financial trading in futures markets. Because these allegations come, in many cases, from experienced participants we do take them seriously and are examining this issue very carefully.

There are two basic types of trading activity that tend to be referred to as "funds." Each is identified to some degree of accuracy in our Large Trader Reporting System. The first represents traditional speculative monies that enter the futures markets through various forms of managed money (hedge funds, commodity pools, etc.). Managed money funds can be either long or short in our markets, depending on their speculative beliefs about future prices. The second type—referred to as "index funds or commodity index traders"—has become important in recent years. These funds seek commodities exposure as another asset class (like stocks, bonds, real estate, etc.). Aggregated, index fund positions are relatively large, predominantly long, and passively positioned—that is, they simply buy exposure to commodities in futures markets and maintain their exposure through pre-specified rolling strategies (before the futures enter delivery months). It is the equivalent to the "buy and hold" strategy common in the stock markets. It is important to understand that dollars placed with index funds are not leveraged. An investor wanting a $10,000 exposure places that amount with the fund which is invested in futures contracts so as to replicate the dollar return of $10,000 invested in the indexed commodities. In response to the growing activity by commodity index traders, the Commission has increased transparency in twelve agricultural markets by publishing weekly data on positions held by index traders since January 2007.

Some in the industry believe the combined positions of "funds" are too large, and therefore must be causing or abetting high and/or volatile prices. COT data used by Commission staff show that price changes are largely unrelated to fund trading. In fact, record agriculture prices have occurred in commodities for which there is no futures contract (durum wheat and hay, for example) and in markets with little or no index trading. Specifically, Minneapolis wheat futures (not part of any index fund) have risen higher than and have been more volatile than Chicago or Kansas City wheat futures and Chicago rice (with relatively modest levels of index trading) has recently set new, all-time high prices.

Utilizing the detailed trader categories in the Large Trader Reporting System, the Office of the Chief Economist (OCE) has been examining daily position changes and price changes to determine whether a cause-effect link can be established between high prices and the trading of various categories of traders—including these funds independently and concurrently. This more general evidence shows that fund positions

have not changed in ways that are consistent with causing recent agriculture price increases. CFTC staff has tracked daily price changes and daily position changes in these markets, finding that managed money funds are largely trend followers, buying on the day after price increases, for instance. Increased index fund positions do not lead to price increases either. For example, in the wheat market the data shows that funds were not adding to their positions during the run up in cash and futures prices. In fact, managed money funds were actually decreasing net long futures positions during the recent run up in wheat prices. The absence of a link between fund positions and price changes suggests that global market fundamentals, including restrictions on exports by several major exporters, provide a better explanation for recent price increases. Even with these facts, it is clear that more analysis and research about index trading needs to occur in order to inform this debate and CFTC staff will be studying ways to improve the transparency and efficiency of the markets regarding these types of traders.

In the agriculture commodities, wide basis relationships (cash-futures differentials), where they exist, are largely explained by historically high diesel prices. Since virtually all major modes of grain transportation (truck, rail, and barge) rely on diesel fuel, historically strong bids for grain at the major export facilities get proportionally lower as the grain is located further from those points and incurs higher transportation costs. For example, export terminal cash prices at New Orleans are very strong, but prices up-river along the Mississippi and Illinois are often much weaker due to the cost of barge freight, which is more than twice as high as it was last year and much larger than we have ever seen at this time of year. Nevertheless, instances of lack of convergence have raised questions about contract design, which the CFTC and the exchanges are closely examining.

CFTC staff has also actively engaged with industry participants to learn more about their concerns regarding trading in our markets. Although staff has confirmed industry complaints that merchants and elevator owners have restricted the amount of fixed-price forward contracting from farmers, we have not seen diminished aggregate short hedging in forward futures months. Analysis of large-trader data currently shows a greater amount of short hedging in wheat, beans, and to a lesser extent, corn, compared to this time last year, by the relevant commercial merchant categories. The CFTC continues to analyze this data and its implications – in hopes of finding ways to encourage more forward contracting by market participants.

Agriculture Commodities Overview

During the recent increase in agriculture futures prices, Commission staff has been talking with virtually every segment of the agricultural industry—producers, cooperatives, grain elevator owners, merchandisers, exporters, millers, trade associations, and the futures exchanges. Using the Large Trader Reporting data, we are tracking trends in the market and analyzing participation in the markets in an effort to understand what is driving these unprecedented prices.

Corn and Soybeans

Generally, planting intentions are an important factor in agricultural markets, and have become even more important because of shifts of acreage caused by growth in demand for corn for ethanol production. About 4 billion bushels of corn will be used to produce ethanol in 2008 (about one-third of the 2007/2008 crop), as seen in Chart 2.

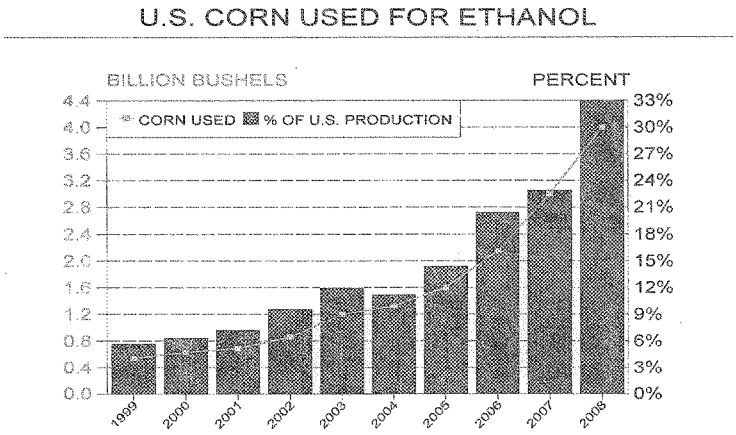


Chart 2: U.S. Corn Used for Ethanol

As land has shifted from other crops to corn production to meet this demand, it has had a ripple effect on prices of competing crops. Both corn and soybean prices have been unusually strong—indeed at record levels—despite bountiful harvests of both in 2007. From the most corn acreage planted since 1944, the last corn harvest was a record, exceeding 13 billion bushels. Despite the fact that corn plantings displaced nearly 12 million acres of soybeans, the soybean crop was plentiful (with strong yields from both North and South America). Coupled with a very large carryover from the 2006/2007 crop, we started the 2007/2008 crop year for soybeans with large supplies. Nevertheless, corn and soybean prices have risen since the 2007 harvest to record levels, generally reflecting strong global demand, geopolitical decisions to restrict food exports, weather concerns and projected tight supplies later this year. For example, the ending stocks for soybeans this year are projected to be one of the lowest in the past three decades.

Wheat

The supply/demand fundamentals for wheat have been very strong. There were poor wheat crops in major growing areas of the world last year, capped off by the second

year of drought reduced harvests in Australia (13 million metric tons (MMT) versus a normal 20 MMT). In the U.S., the soft red winter and spring wheat production were of reasonable size historically, but the hard red winter crop was damaged by late frosts, which resulted in poor protein content and lower quality in other categories. The USDA is projecting the lowest carryover of wheat stocks in 30 years and the lowest world wheat stocks-to-use ratio in recorded history. Chart 3 illustrates that tight world wheat supply situation that has caused high global wheat prices.

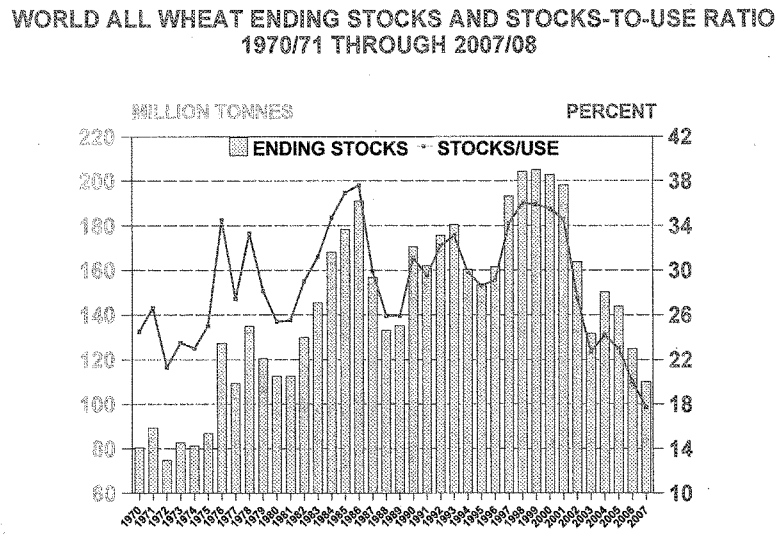


Chart 3: Historical Wheat Stocks and Use

With world stocks of wheat historically low, the market is especially vulnerable to shocks regarding planting intentions for the coming year. Wheat prices in late 2007 were somewhat inflated following the poor October 2007 harvest in Australia and the market expected much larger fall plantings of U.S. winter wheat to follow. However, when the monthly USDA Supply and Demand Report (released on January 11, 2008) revealed that fall plantings were lower than expected, both U.S. and global wheat market prices rose sharply. The response spilled over into the corn and soybean markets as well, since increased wheat prices signaled that additional wheat plantings would likely shift acreage away from corn and soybeans to spring wheat.

Wheat is an essential food staple, and its demand is relatively price inelastic – meaning price changes have little impact on demand. Indeed as we saw this winter, U.S. millers and foreign buyers bid up prices for low physical supplies of wheat, particularly high protein varieties, to extraordinarily high levels. Hard red spring wheat cash prices rose to over $20/bushel, at one point leaving the limit-locked Minneapolis Grain Exchange (MGEX) futures contract far behind. Durum wheat cash prices rose even more sharply to over $25/bushel, both in the U.S. and Canada. These examples are notable because MGEX wheat futures have no index trading and durum wheat has no futures contract, leaving supply/demand fundamentals as the likely cause of such run-ups in prices.

Exports are another indicator of abnormally high demand. Despite high prices, U.S. exports to both wealthier countries like Japan and poorer countries like Egypt continue. Overall U.S. wheat exports are up 40 percent over last year, and include exports to North Africa and the Middle East, markets mostly served by Europe and Ukraine for the past few decades.

Cotton

During 2007 and 2008, cotton prices have lagged behind prices for many other crops. Although acreage planted to cotton was down by 29 percent in 2007, record yields resulted in a relatively large crop of 19.2 million bales. Consumption (domestic use and exports) of U.S. cotton for this year will be around 18.8 million bales, so projected season ending stocks will increase by .4 million bales to 9.9 million bales, a relatively large level, equivalent to about 53 percent of annual consumption. Despite the relative abundance of cotton stocks, cotton futures prices also rose sharply beginning in mid-February – as shown in Chart 4.

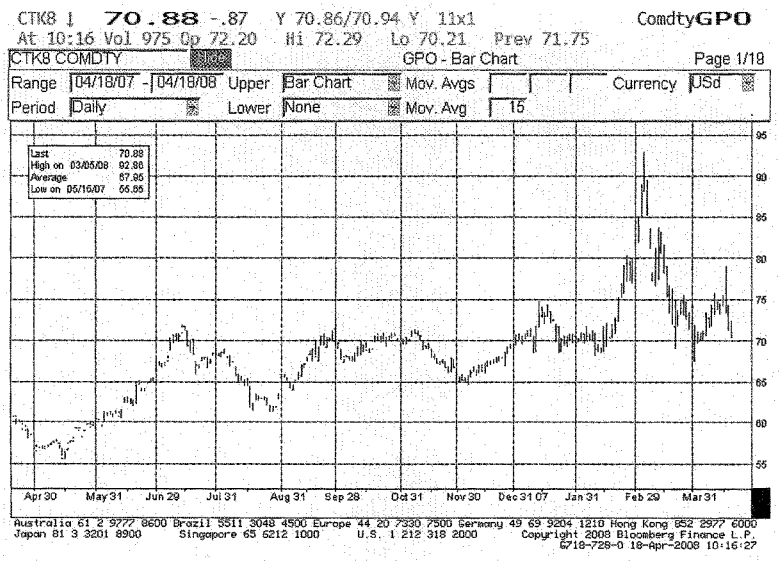


Chart 4: May 2008 Ice Futures U.S. Cotton

Some market commentary attributed the rise in cotton prices to expectations that there would be a further loss of about 12 percent of acreage planted to cotton in 2008, acreage lost to other crops with relatively higher prices. At the recent CFTC agriculture forum, some cotton market participants were less convinced that market fundamentals were the cause of those price moves. CFTC staff continues to closely study the data and circumstances surrounding this time period with these markets to ensure that prices were not artificially inflated.

Energy Products Overview

Similar to the agriculture markets, the energy markets, particularly crude oil, have also experienced a marked increase in futures prices during the past couple of years. The Commission's oversight of oil futures trading focuses on two markets: primarily on the New York Mercantile Exchange (NYMEX) and secondarily on the Intercontinental Exchange Europe (ICE Futures Europe) – the latter because one of its contracts cash settles on the price of the NYMEX WTI Light Sweet Crude futures contract.

Crude Oil

Crude oil prices have risen significantly during the past few years and are currently above $120/barrel. Concurrently, open interest in WTI crude oil futures has expanded dramatically, growing from about 1 million futures equivalent contracts in 2004 to about 3 million contracts during the most recent week.

We have studied these markets to better understand the components of this rapid growth and our studies find three major trends in crude oil markets. First, we see large increases in the use of futures contracts by both commercial and non-commercial interests. Growth across these groups has been largely parallel, however, with non-commercial share of total open interest increasing only marginally from 34% to about 36% over the past three years. It is important to understand that the majority of non-commercial positions are in spreads; that is, taking a long position in one contract month and a short position in another. This is important because any upward pressure on price due to those long positions is almost surely offset by downward pressure from the short side of those spreads.

Second, much of the growth in open interest is concentrated in futures contracts that expire after 12 months. Whereas contracts beyond one year were rare in 2000, we are now seeing significant open interest in contracts with expiries out to five years and beyond. In fact, contracts extending beyond eight years are now available at NYMEX. Charts 5 and 6 below highlight these two trends.

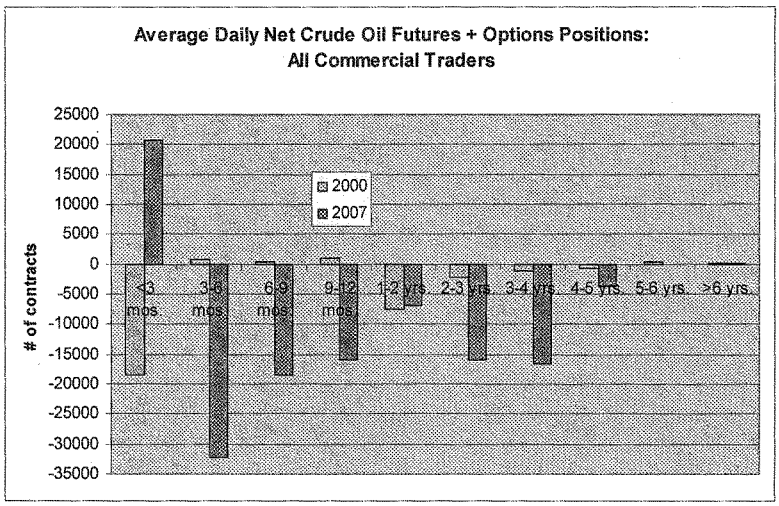


Chart 5: Trends in Commercial Trader Open Interest

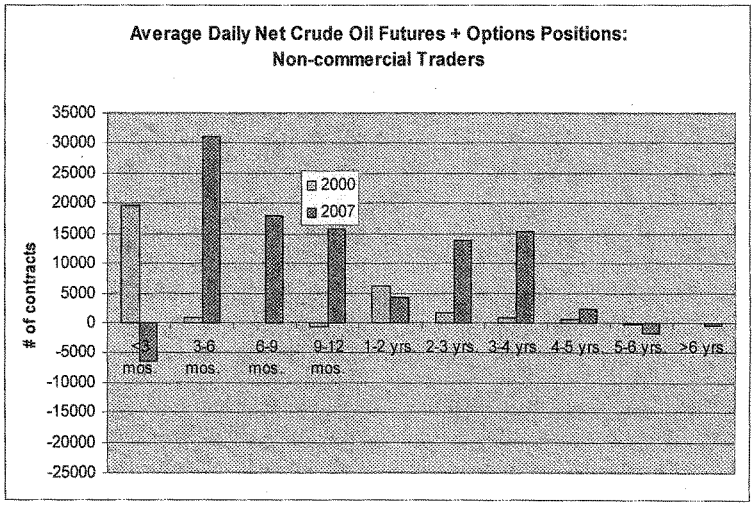


Chart 6: Trends in Non-Commercial Trader Open Interest

Charts 5 and 6 also highlight the fact that commercial traders generally take short positions to hedge and rely on non-commercial traders to take the opposite side of their trades. Thus much of the growth in non-commercial positions appears to be related to meeting the needs of commercial hedgers, highlighting the fact that the supply and demand for hedging services intimately ties hedgers and speculators together in futures markets.

The third major trend during the past few years in crude oil markets is that swap dealers now hold significantly larger positions in crude oil futures. These dealers, who sell over-the-counter swaps to their customers (such as pension funds buying commodity index funds or airlines seeking to hedge jet fuel costs), turn around and hedge their price exposures with long futures positions in crude oil and other commodities. This development has expanded the ranks of commercial traders. Traditional commercial traders predominantly hedge long cash positions using short futures contracts. Conversely, swap dealers (also classified as commercial traders) frequently hedge short swap positions with long futures contracts. Charts 7 and 8 depict these differences.

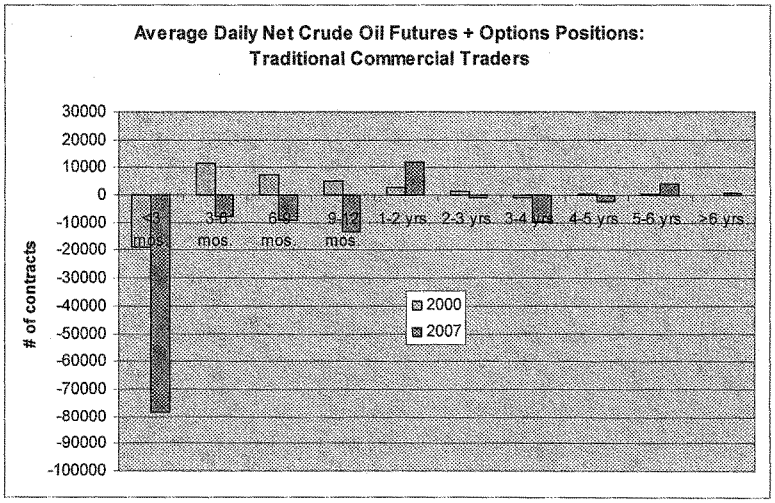


Chart 7: Trends in Traditional Commercial Trader Open Interest

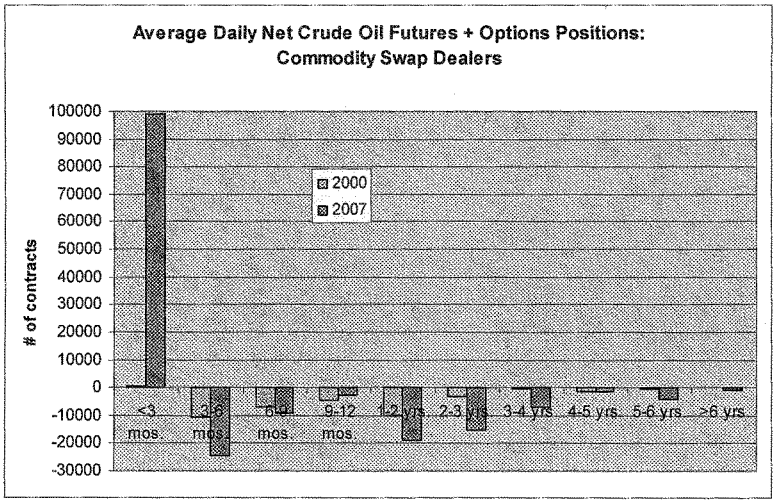


Chart 8: Trends in Swap Dealer Open Interest

Chart 8 also demonstrates that the growth in swap dealer trading in the near-term futures contract largely represents flows from commodity index funds.

Given the substantial increase in open interest in crude oil futures markets, OCE utilizes the Commission's extensive data to examine the role of all market participants and how their positions might affect prices. Although longer-term studies show a slight increase in non-commercial market share in the crude oil futures market, OCE analysis shows that the more recent increase in oil prices to levels above $120/barrel has not been accompanied by significant changes to the participants in this market. Chart 9 shows that the number of commercial and non-commercial traders has remained nearly constant over the past 22 months, with about 120 commercial and 310 non-commercial participants in the market.

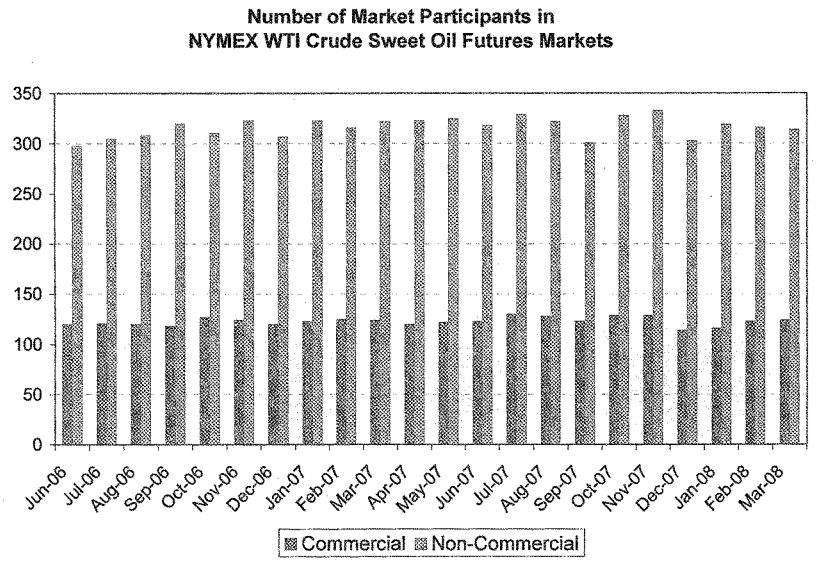


Chart 9: Commercial vs. Non Commercial Participants

OCE has also studied the impact of speculators as a group in oil markets during the most recent price run-up. Specifically, we have closely examined the relation between futures prices and positions of speculators in crude oil. Our studies consistently find that when new information comes to the market and prices respond, it is the commercial traders (such as oil companies, utilities, airlines) who react first by adjusting their futures positions. When these commercial traders adjust their futures positions, it is speculators who are most often on the other side of the trade. Price changes that prompt hedgers to alter their futures positions attract speculators who change their positions in response. Simply stated, there is no evidence that position changes by speculators precede price changes for crude oil futures contracts. Our tests cover various time frames and intervals from one to five days. When evidence does show that a group of trader positions precedes price changes in these tests, commercial trader group positions are those found to significantly precede crude oil futures price changes.

To highlight this fact more clearly, Chart 10 plots the prices and the market share of one group of active speculators (managed money traders) over the past 22 months. Notably, while WTI futures contract prices have more than doubled during the past 14 months, managed money positions, as a fraction of the overall market, have changed very little. Speculative position changes have not amplified crude oil futures price

changes. More specifically, the recent crude oil price increases have occurred with no significant change in net speculative positions.

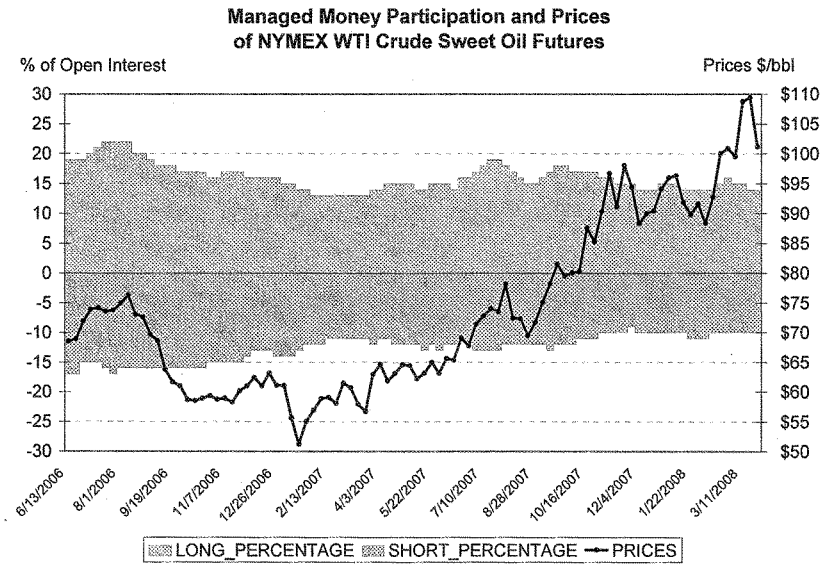


Chart 10: Managed Money Participation

OCE has also studied position changes of commercial and non-commercial traders by category, finding similar results. In no case do we find net position changes of any category of non-commercial traders preceding significantly changes in crude oil futures prices. Chart 11 highlights the fact that commercial and non-commercial open interest has grown during the most recent 22 months, but generally remains balanced between long and short positions for each trader group.

Traders' Open Interest in NYMEX WTI Crude Sweet Oil Futures

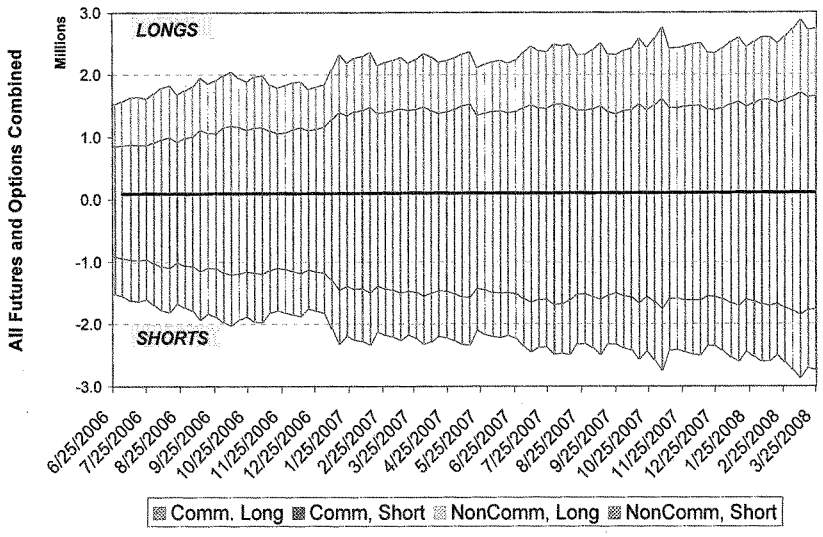


Chart 11: Commercial vs. Non Commercial Open Interest

Natural Gas

Increasing demand for electrical capacity continues to exert upward pressure on prices for natural gas. Recent NYMEX prices for June deliveries are near $11.30 per MMBTU (million British Thermal Units), about 73% higher than the corresponding price three years ago.

We compare April 2008 participation in the natural gas contract with participation in April 2005 in Charts 12 and 13. In April 2005, non-commercial participants held 47% of the open futures positions, with hedge funds comprising the majority (31%) of those positions. In April 2008, non-commercial participation increased by a modest 5%, with 3% of this increase coming from hedge funds. These aggregated figures suggest that speculative participation in natural gas futures has not grown substantially while prices have risen more significantly during the past three years. Nevertheless, the Commission's surveillance staff closely follows this market as well.

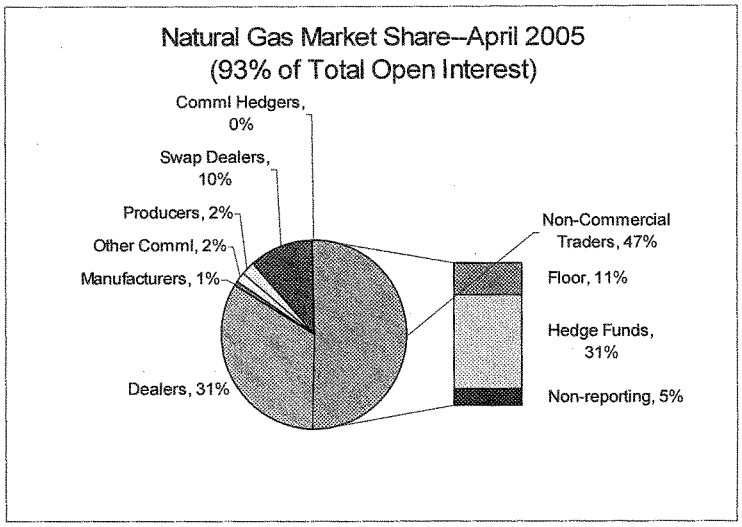


Chart 12: Natural Gas Market Share April 2005

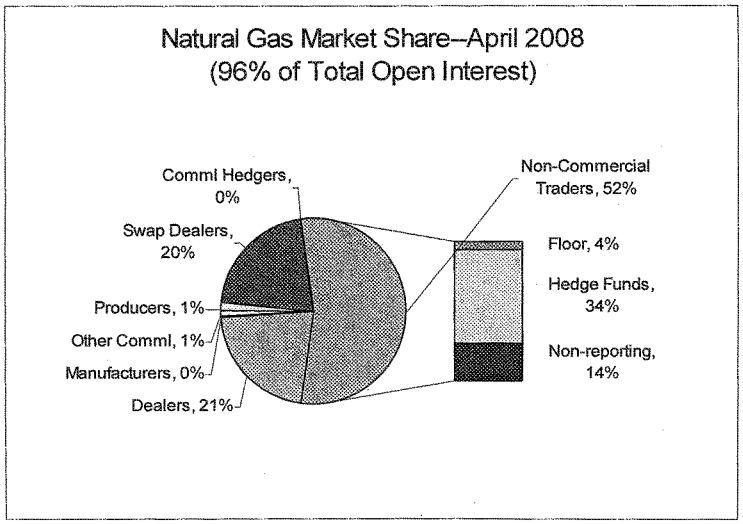


Chart 13: Natural Gas Market Share April 2008

Conclusion

Some observers have suggested that higher crude oil and agriculture commodity futures prices are being driven by speculators in the financial markets, and have suggested steps to reduce or limit their actions in the markets. As you can see, the CFTC has been actively engaged with industry participants during this time of extraordinary price increases. In addition, we have utilized our comprehensive data to rigorously analyze the role of investors (both hedgers and speculators) in both energy and agriculture futures markets.

All the data modeling and analysis we have done to date indicates there is little economic evidence to demonstrate that prices are being systematically driven by speculators in these markets. Generally, the data shows that:

- Prices have risen sharply for many commodities that have neither developed futures markets (e.g. durham wheat, steel, iron ore, coal, etc.) nor institutional fund investments (Minneapolis wheat and Chicago rice).
- Markets where index trading is greatest as a percentage of total open interest (live cattle and hog futures) have actually suffered from falling prices during the past year.
- The level of speculation in the agriculture commodity and the crude oil markets has remained relatively constant in percentage terms as prices have risen.
- Our studies in agriculture and crude oil markets have found that speculators tend to follow trends in prices rather than set them.
- Speculators such as managed money traders are both buyers and sellers in these markets. For example, data shows that there are almost as many bearish funds as bullish funds in wheat and crude oil.

Given the widespread impact of the higher futures prices, the CFTC will continue to collect and analyze our data closely, including continuing discussions and work with academic institutions, industry experts and other government experts and economists. In the past few months, OCE and surveillance staffs have conducted dozens of different analyses to examine our markets. We will continue to do that type of work to ensure we are taking a full view of the marketplace.

We realize that others have asserted that historically high futures price levels have been driven by speculative traders. However, our comprehensive analysis of the actual position data of these traders fails to support this contention – but we encourage others with data and findings that differ from ours to share them with us.

Simply put, the economic data shows that overall commodity price levels, including agriculture commodity and energy futures prices, are being driven by powerful fundamental economic forces and the laws of supply and demand. These fundamental economic factors include increased demand from emerging markets; decreased supply

due to weather or geopolitical events; and a weakened dollar. Together, these fundamental economic factors have formed a "perfect storm" that is causing significant upward pressure on futures prices across-the-board.

The agency prides itself in its robust surveillance and enforcement programs, complemented by rigorous economic analysis, that are used to oversee the U.S. futures and options markets. This is a dynamic time in the futures markets, given the growth in trading volume, product innovation and complexity, and globalization in all commodities. The Commission has the authority it needs to continue to work to promote competition and innovation, while at the same time, fulfilling our mandate under the Commodity Exchange Act to protect the public interest and to enhance the integrity of U.S. futures markets.

As you know, there is an amendment to the Commodity Exchange Act that is now part of the Farm Bill conference report that largely reflects the Commission's recommendations on the need for some additional tools to oversee trading done on Exempt Commercial Markets. These provisions represent years of hard work and bipartisan effort to find the right balance of enhanced market oversight and transparency while promoting market innovation and competition. Additionally, the Commission's anti-fraud authority over transactions on these markets will be clarified and strengthened. Finally, the penalties that may be imposed for violating the anti-manipulation prohibitions of the Commodity Exchange Act will be raised from a little more than $100,000 to $1,000,000 per violation. The Commission strongly supports this legislation that would give it additional necessary oversight of the markets, particularly in exempt energy trading.

Not surprisingly, additional authorities as included in the Farm Bill will mean a need for additional funding for the agency – above the current funding request of $130 million for Fiscal Year 2009. Current staff estimates indicate it may require roughly $6 million in additional funding to hire about 30 additional staff to carry out the new authorities. The legislation that is part of the Farm bill and a commensurate increase in funding would ensure the agency has the tools necessary to oversee these $5 trillion-a-day markets.

At the Commission, we are devoting, and will continue to devote, an extraordinary amount of resources to ensure that futures markets are responding to fundamentals and are serving the role of hedging and price discovery.

Testimony of Michael W. Masters

Managing Member/Portfolio Manager

Masters Capital Management, LLC

Good morning and thank you, Mr. Chairman and Members of the Committee, for the invitation to speak to you today. This is a topic that I care deeply about, and I appreciate the chance to share what I have discovered.

I have been successfully managing a long-short equity hedge fund for over 12 years and I have extensive contacts on Wall Street and within the hedge fund community. It's important that you know that I am not currently involved in trading the commodities futures markets. I am not representing any corporate, financial, or lobby organizations. I am speaking with you today as a concerned citizen whose professional background has given me insight into a situation that I believe is negatively affecting the U.S. economy. While some in my profession might be disappointed that I am presenting this testimony to Congress, I feel that it is the right thing to do.

You have asked the question "Are Institutional Investors contributing to food and energy price inflation?" And my unequivocal answer is "YES." In this testimony I will explain that Institutional Investors are one of, if not the primary, factors affecting commodities prices today. Clearly, there are many factors that contribute to price determination in the commodities markets; I am here to expose a fast-growing yet virtually unnoticed factor, and one that presents a problem that can be expediently corrected through legislative policy action.

Commodities prices have increased more in the aggregate over the last five years than at any other time in U.S. history.[1] We have seen commodity price spikes occur in the past as a result of supply crises, such as during the 1973 Arab Oil Embargo. But today, unlike previous episodes, supply is ample: there are no lines at the gas pump and there is plenty of food on the shelves.

If supply is adequate - as has been shown by others who have testified before this committee[2] - and prices are still rising, then demand must be increasing. But how do you explain a continuing increase in demand when commodity prices have doubled or tripled in the last 5 years?

What we are experiencing is a demand shock coming from a new category of participant in the commodities futures markets: Institutional Investors. Specifically, these are Corporate and Government Pension Funds, Sovereign Wealth Funds, University Endowments and other Institutional Investors. Collectively, these investors now account on average for a larger share of outstanding commodities futures contracts than any other market participant.[3]

These parties, who I call *Index Speculators,* allocate a portion of their portfolios to "investments" in the commodities futures market, and behave very differently from the traditional speculators that have always existed in this marketplace. I refer to them as "Index" Speculators because of their investing strategy: they distribute their allocation of dollars across the 25 key commodities futures according to the popular indices – the Standard & Poors - Goldman Sachs Commodity Index and the Dow Jones - AIG Commodity Index.[4]

I'd like to provide a little background on how this new category of "investors" came to exist.

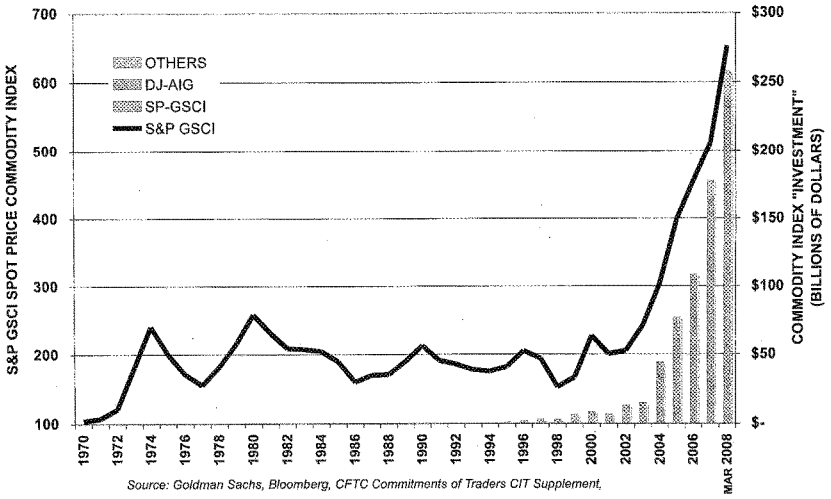
In the early part of this decade, some institutional investors who suffered as a result of the severe equity bear market of 2000-2002, began to look to the commodity futures market as a potential new "asset class" suitable for institutional investment. While the commodities markets have always had some speculators, never before had major investment institutions seriously considered the commodities futures markets as viable for larger scale investment programs. Commodities looked attractive because they have historically been "uncorrelated," meaning they trade inversely to fixed income and equity portfolios. Mainline financial industry consultants, who advised large institutions on portfolio allocations, suggested for the first time that investors could "buy and hold" commodities futures, just like investors previously had done with stocks and bonds.

Index Speculator Demand Is Driving Prices Higher

Today, Index Speculators are pouring billions of dollars into the commodities futures markets, speculating that commodity prices will increase. Chart One shows Assets allocated to commodity index trading strategies have risen from $13 billion at the end of 2003 to $260 billion as of March 2008,[5] and the prices of the 25 commodities that compose these indices have risen by an average of 183% in those five years![6]

CHART ONE

COMMODITY INDEX INVESTMENT COMPARED TO S&P GSCI SPOT PRICE COMMODITY INDEX



Source: Goldman Sachs, Bloomberg, CFTC Commitments of Traders CIT Supplement.

According to the CFTC and spot market participants, commodities futures prices are the benchmark for the prices of actual physical commodities, so when Index Speculators drive futures prices higher, the effects are felt immediately in spot prices and the real economy.[7] So there is a direct link between commodities futures prices and the prices your constituents are paying for essential goods.

The next table looks at the commodity purchases that Index Speculators have made via the futures markets. These are huge numbers and they need to be put in perspective to be fully grasped.

In the popular press the explanation given most often for rising oil prices is the increased demand for oil from China. According to the DOE, annual Chinese demand for petroleum has increased over the last five years from 1.88 billion barrels to 2.8 billion barrels, an increase of 920 million barrels.[8] Over the same five-year period, Index Speculators' demand for petroleum futures has increased by 848 million barrels.[9] The increase in demand from Index Speculators is almost equal to the increase in demand from China!

Commodity Purchases By Index Speculators The Last 5 Years

Sector	*Commodity*	*Units*	*Previous Futures Market Stockpile January 1, 2003*	*Net Purchases Last 5¼ Years*	*Current Futures Market Stockpile March 12, 2008*
Agricultural	Cocoa	Metric Tons	18,828	303,352	322,180
	Coffee	Pounds	195,716,944	2,238,858,056	2,434,575,000
	Corn	Bushels	242,561,708	2,138,383,292	2,380,945,000
	Cotton	Pounds	544,934,999	5,548,915,001	6,093,850,000
	Soybean Oil	Pounds	163,135,678	4,312,624,322	4,475,760,000
	Soybeans	Bushels	81,028,272	890,616,728	971,645,000
	Sugar	Pounds	2,291,358,746	46,094,097,254	48,385,456,000
	Wheat	Bushels	166,738,225	967,351,775	1,134,090,000
	Wheat KC	Bushels	54,746,014	102,618,986	157,365,000
Livestock	Feed Cattle	Pounds	104,446,612	365,453,388	469,900,000
	Lean Hogs	Pounds	517,414,747	3,827,425,253	4,344,840,000
	Live Cattle	Pounds	669,766,732	5,099,033,268	5,768,800,000
Energy	Brent Crude Oil	Barrels	47,075,357	144,524,265	191,599,621
	WTI Crude Oil	Barrels	99,880,741	538,499,579	638,380,320
	Gasoil	Metric Tons	1,682,662	6,027,680	7,710,342
	Heating Oil	Gallons	1,067,859,608	2,568,925,661	3,636,785,269
	Gasoline	Gallons	1,102,184,401	2,488,458,616	3,590,643,018
	Natural Gas	Million BTUs	330,652,415	1,932,356,225	2,263,008,640
Base Metals	Aluminum	Metric Tons	344,246	3,232,406	3,576,652
	Lead	Metric Tons	82,019	158,726	240,745
	Nickel	Metric Tons	20,147	101,988	122,135
	Zinc	Metric Tons	133,381	1,182,091	1,315,472
	Copper	Metric Tons	220,096	1,144,538	1,364,634
Precious Metals	Gold	Troy Ounces	979,863	8,742,401	9,722,264
	Silver	Troy Ounces	11,126,862	152,866,187	163,993,049

Sources: Goldman Sachs, Standard & Poors, Dow Jones, CFTC Commitments of Traders CIT Supplement, calculations

In fact, Index Speculators have now stockpiled, via the futures market, the equivalent of 1.1 billion barrels of petroleum, effectively adding eight times as much oil to their own stockpile as the United States has added to the Strategic Petroleum Reserve over the last five years.[10]

Let's turn our attention to food prices, which have skyrocketed in the last six months. When asked to explain this dramatic increase, economists' replies typically focus on the diversion of a significant portion of the U.S. corn crop to ethanol production.[11] What they overlook is the fact that Institutional Investors have purchased over 2 billion bushels of corn futures in the last five years. Right now, Index Speculators have stockpiled enough corn futures to potentially fuel the entire United States ethanol industry at full capacity for a year.[12] That's equivalent to producing 5.3 billion gallons of ethanol, which would make America the world's largest ethanol producer.[13]

Turning to Wheat, in 2007 Americans consumed 2.22 bushels of Wheat per capita.[14] At 1.3 billion bushels, the current Wheat futures stockpile of Index Speculators is enough to supply every American citizen with all the bread, pasta and baked goods they can eat for the next two years!

Index Speculator Demand Characteristics

Demand for futures contracts can only come from two sources: Physical Commodity Consumers and Speculators. Speculators include the Traditional Speculators who have always existed in the market, as well as Index Speculators. Five years ago, Index Speculators were a tiny fraction of the commodities futures markets. Today, in many commodities futures markets, they are the single largest force.[15] The huge growth in their demand has gone virtually undetected by classically-trained economists *who almost never analyze demand in futures markets.*

Index Speculator demand is distinctly different from Traditional Speculator demand; it arises purely from portfolio allocation decisions. When an Institutional Investor decides to allocate 2% to commodities futures, for example, they come to the market with a set amount of money. They are not concerned with the price per unit; they will buy as many futures contracts as they need, at whatever price is necessary, until all of their money has been "put to work." Their insensitivity to price multiplies their impact on commodity markets.

Furthermore, commodities futures markets are much smaller than the capital markets, so multi-billion-dollar allocations to commodities markets will have a far greater impact on prices. In 2004, the total value of futures contracts outstanding for all 25 index commodities amounted to only about $180 billion.[16] Compare that with worldwide equity markets which totaled $44 trillion[17], or over 240 times bigger. That year, Index Speculators poured $25 billion into these markets, an amount equivalent to 14% of the total market.[18]

CHART TWO

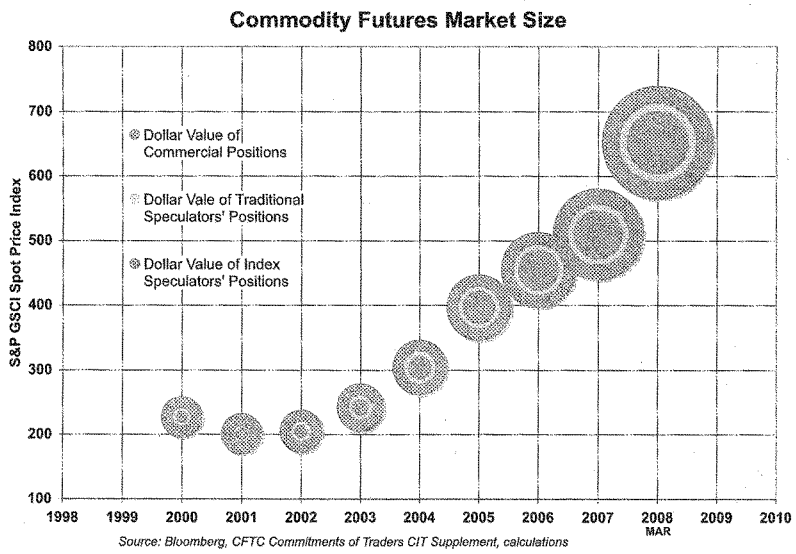


Chart Two shows this dynamic at work. As money pours into the markets, two things happen concurrently: the markets expand and prices rise.

One particularly troubling aspect of Index Speculator demand is that *it actually increases the more prices increase*. This explains the accelerating rate at which commodity futures prices (and actual commodity prices) are increasing. Rising prices attract more Index Speculators, whose tendency is to increase their allocation as prices rise. So their profit-motivated demand for futures is the inverse of what you would expect from price-sensitive consumer behavior.

You can see from Chart Two that prices have increased the most dramatically in the first quarter of 2008. We calculate that Index Speculators flooded the markets with $55 billion in just the first 52 trading days of this year.[19] That's an increase in the dollar value of outstanding futures contracts of more than $1 billion per trading day. Doesn't it seem likely that an increase in demand of this magnitude in the commodities futures markets could go a long way in explaining the extraordinary commodities price increases in the beginning of 2008?

There is a crucial distinction between Traditional Speculators and Index Speculators: Traditional Speculators provide liquidity by both buying and selling futures. Index Speculators buy futures and then roll their positions by buying calendar spreads. *They never sell.* Therefore, they consume liquidity and provide zero benefit to the futures markets.[20]

It is easy to see now that traditional policy measures will not work to correct the problem created by Index Speculators, whose allocation decisions are made with little regard for the supply and demand fundamentals in the physical commodity markets. If OPEC supplies the markets with more oil, it will have little affect on Index Speculator demand for oil futures. If Americans reduce their demand through conservation measures like carpooling and using public transportation, it will have little affect on Institutional Investor demand for commodities futures.

Index Speculators' trading strategies amount to virtual hoarding via the commodities futures markets. Institutional Investors are buying up essential items that exist in limited quantities for the sole purpose of reaping speculative profits.

Think about it this way: If Wall Street concocted a scheme whereby investors bought large amounts of pharmaceutical drugs and medical devices in order to profit from the resulting increase in prices, making these essential items unaffordable to sick and dying people, society would be justly outraged.

Why is there not outrage over the fact that Americans must pay drastically more to feed their families, fuel their cars, and heat their homes?

Index Speculators provide no benefit to the futures markets and they inflict a tremendous cost upon society. Individually, these participants are not acting with malicious intent; collectively, however, their impact reaches into the wallets of every American consumer.

Is it necessary for the U.S. economy to suffer through yet another financial crisis created by new investment techniques, the consequences of which have once again been unforeseen by their Wall Street proponents?

The CFTC Has Invited Increased Speculation

When Congress passed the Commodity Exchange Act in 1936, they did so with the understanding that speculators should not be allowed to dominate the commodities futures markets. Unfortunately, the CFTC has taken deliberate steps to allow certain speculators virtually unlimited access to the commodities futures markets.

The CFTC has granted Wall Street banks an exemption from speculative position limits when these banks hedge over-the-counter swaps transactions.[21] This has effectively opened a loophole for unlimited speculation. When Index Speculators enter into commodity index swaps, which 85-90% of them do, they face no speculative position limits.[22]

The really shocking thing about the Swaps Loophole is that Speculators of all stripes can use it to access the futures markets. So if a hedge fund wants a $500 million

position in Wheat, which is way beyond position limits, they can enter into swap with a Wall Street bank and then the bank buys $500 million worth of Wheat futures.[23]

In the CFTC's classification scheme all Speculators accessing the futures markets through the Swaps Loophole are categorized as "Commercial" rather than "Non-Commercial." The result is a gross distortion in data that effectively hides the full impact of Index Speculation.

Additionally, the CFTC has recently proposed that Index Speculators be exempt from all position limits, thereby throwing the door open for unlimited Index Speculator "investment."[24] The CFTC has even gone so far as to issue press releases on their website touting studies they commissioned showing that commodities futures make good additions to Institutional Investors' portfolios.[25]

Is this what Congress expected when it created the CFTC?

Congress Should Eliminate The Practice Of Index Speculation

I would like to conclude my testimony today by outlining three steps that can be taken to immediately reduce Index Speculation.

Number One:
Congress has closely regulated pension funds, recognizing that they serve a public purpose. Congress should modify ERISA regulations to prohibit commodity index replication strategies as unsuitable pension investments because of the damage that they do to the commodities futures markets and to Americans as a whole.

Number Two:
Congress should act immediately to close the Swaps Loophole. Speculative position limits must "look-through" the swaps transaction to the ultimate counterparty and hold that counterparty to the speculative position limits. This would curtail Index Speculation and it would force **ALL** Speculators to face position limits.

Number Three:
Congress should further compel the CFTC to reclassify all the positions in the Commercial category of the Commitments of Traders Reports to distinguish those positions that are controlled by "Bona Fide" Physical Hedgers from those controlled by Wall Street banks. The positions of Wall Street banks should be further broken down based on their OTC swaps counter-party into "Bona Fide" Physical Hedgers and Speculators.

There are hundreds of billions of investment dollars poised to enter the commodities futures markets at this very moment.[26] If immediate action is not taken, food and energy prices will rise higher still. This could have catastrophic economic effects on millions of already stressed U.S. consumers. It literally could mean starvation for millions of the world's poor.[27]

If Congress takes these steps, the structural integrity of the futures markets will be restored. Index Speculator demand will be virtually eliminated and it is likely that food and energy prices will come down sharply.

APPENDIX: HOW TO CALCULATE INDEX SPECULATORS' POSITIONS

If someone knows how much money is invested in the total index then it is easy to calculate how much must be in each commodity in dollars and in futures contracts.

Total Dollars Invested In Index	x	Weight Of Individual Commodity	=	Dollars In Individual Commodity

Total Dollars Invested In Index	x	Weight Of Individual Commodity	/	Dollar Value Of A Commodity Contract	=	# Of Contracts In An Individual Commodity

And therefore if someone knows how many contracts are in an individual commodity along with the dollar value of a contract and the weight of that commodity in the index then you can calculate the total dollars invested in the index as follows:

# Of Contracts In An Individual Commodity	x	Dollar Value Of A Commodity Contract	/	Weight Of Individual Commodity	=	Total Dollars Invested In Index

The CFTC starting in January 2006 has been publishing the Commodity Index Trader Supplement to the Commitments Of Traders report. This supplemental report shows the reported positions of Index Speculators in 12 different agricultural commodities. Of the 12, two commodities:, KC Wheat and Feeder Cattle, are part of the S&P GSCI (and not the DJ-AIG) and one commodity: Soybean Oil, is part of the DJ-AIG (and not the S&P-GSCI). Note that 95% of dollars indexed to commodities are replicating either the S&P-GSCI or DJ-AIG.

Both the S&P-GSCI and DJ-AIG publish on a daily basis the individual weights of their constituent commodities. Also futures market data providers like Bloomberg publish daily closing prices for the commodities. Since the futures contract terms do not change that enables someone to calculate the daily dollar values of the individual commodity contracts.

So with these three data points it is simple to calculate the total dollars invested in the S&P-GSCI and the DJ-AIG on a weekly basis. And once the total dollars invested in these two indices is known then that results in the ability to calculate the number of contracts held by Index Speculators in the other 13 non-agricultural commodities.

A detailed example of this 3 step process follows.

Step One - Estimate Total Amount Invested In S&P-GSCI and DJ-AIG

According to the CFTC's January 17, 2006 CIT report, Index Specualtors had positiions in KC Wheat, Feeder Cattle and Soybean Oil of 21366 , 5613 and 59264 contracts

respectively. Plugging in the weights and contract values from the appropriate sources yields the following calculations:

21,366	X	$18,762.50	/	0.82%	=	$48,887,753,049
5,613	X	$56,137.50	/	0.68%	=	$46,338,204,044
59,264	X	$12,732.00	/	2.77%	=	$27,240,045,054

So the S&P-GSCI had somewhere between $46 and $49 billion invested in it and the DJ-AIG had around $27 billion invested in it. This corresponds well to the figures published by Goldman Sachs and Dow Jones.

CALCULATIONS OF INDEX SPECULATORS' POSITIONS *(JANUARY 17, 2006)*

	PERCENTAGE WEIGHTS		POSITIONS (in millions)		Contract Dollar Value	POSITIONS (in contracts)		Combined Position Estimate	CFTC Actual Positions
	S&P-GSCI	DI-AIG	S&P-GSCI	DI-AIG		S&P-GSCI	DI-AIG		
Cocoa	0.2%	0.0%	$95.5	$0.0	$15,710	6,081	0	6,081	9,390
Coffee	0.8%	2.9%	$373.2	$799.0	$46,425	8,039	17,201	25,240	28,777
Corn	2.0%	5.9%	$954.0	$1,600.0	$10,438	91,398	153,292	244,689	305,264
Cotton	0.9%	3.2%	$444.9	$862.0	$27,995	15,891	30,777	46,668	53,741
Soybean Oil	0.0%	2.8%	$0.0	$753.0	$12,732	0	59,173	59,173	59,264
Soybeans	1.4%	7.8%	$672.5	$2,116.0	$28,563	23,543	74,073	97,617	103,304
Sugar	1.9%	3.0%	$884.9	$808.0	$17,438	50,742	46,352	97,094	124,487
Wheat	2.1%	4.8%	$1,009.1	$1,300.0	$16,438	61,393	79,082	140,475	181,986
Wheat KC	0.8%	0.0%	$396.0	$0.0	$18,763	21,106	0	21,106	21,366
Feed Cattle	0.7%	0.0%	$329.5	$0.0	$56,138	5,869	0	5,869	5,613
Lean Hogs	1.4%	4.4%	$663.8	$1,185.0	$23,790	27,902	49,824	77,726	69,591
Live Cattle	2.7%	6.1%	$1,293.2	$1,660.0	$38,620	33,486	42,982	76,468	71,834
Brent Crude Oil	14.5%	0.0%	$6,901.3	$0.0	$64,900	106,337	0	106,337	
WTI Crude Oil	31.3%	12.8%	$14,888.0	$3,482.0	$66,310	224,521	52,516	277,036	
Gasoil	3.1%	0.0%	$1,472.7	$0.0	$54,725	26,911	0	26,911	
Heating Oil	8.0%	3.8%	$3,823.7	$1,048.0	$75,243	50,818	13,924	64,742	
Gasoline	7.9%	4.1%	$3,780.5	$1,105.0	$76,579	49,368	14,424	63,792	
Natural Gas	10.6%	12.3%	$5,030.8	$3,355.0	$91,680	54,873	36,591	91,464	
Aluminum	3.1%	6.9%	$1,464.4	$1,866.0	$59,475	24,621	31,383	56,004	
Lead	0.3%	0.0%	$156.4	$0.0	$31,800	4,918	0	4,918	
Nickel	0.7%	2.7%	$312.8	$724.0	$88,182	3,547	8,214	11,762	
Zinc	0.7%	2.7%	$355.6	$736.0	$51,900	6,852	14,184	21,036	
Copper (LME)	2.8%	0.0%	$1,335.1	$0.0	$116,575	11,453	0	11,453	
Copper (CMX)	0.0%	5.9%	$0.0	$1,602.0	$54,225	0	29,542	29,542	
Gold	1.8%	6.2%	$875.9	$1,694.0	$55,430	15,802	30,568	46,370	
Silver	0.2%	2.0%	$99.2	$545.0	$45,100	2,201	12,080	14,280	
TOTAL	100%	100%	$47,613	$27,240					

Source: Standard & Poor's, Dow Jones, Bloomberg Data

Step Two - Calculate Position Size For Other Commodities

If $47.6 billion is used as an estimate for the S&P-GSCI and then $27.2 billion is used for the DJ-AIG it is possible to calculate (using the formulas above) Index Speculators positions in all the other commodities. The table above shows the results.

Step Three - Compare With Actual CFTC Figures For Accuracy

The final column in the table shows the actual figures released by the CFTC. As you can see in almost all cases the estimates generated using this method yield results that are less than the actual reported results. That increases one's confidence that this method is in fact conservative.

Final Note

This method of calculating Index Speculators is almost identical to the methods used by Philip Verleger (www.pkverlegerllc.com), Steve Briese (www.commitmentsoftraders.org) and others. It is not clear who deserves the credit for developing it but it clearly is not us.

ENDNOTES

[1] "Reserve Management, The Commodity Bubble, The Metals Manipulation, The Contagion Risk To Gold And The Threat Of The Great Hedge Fund Unwind To Spread Product." Frank Veneroso, July 19, 2007, pp. 5-6. http://www.venerosoassociates.net/Reserve%20Management%20Parts%20I%20andII%20WBP%20Public%2071907.pdf

[2] http://hsgac.senate.gov/public/index.cfm?fuseaction=Hearings.Detail&HearingID=dc7368c2-0ea1-4151-9fc5-06317a5bba79

[3]

Commodities Futures Markets Open Interest

2008	LONG / DEMAND SIDE		
	Physical Hedger	Traditional Speculator	Index Speculator
COCOA	33%	48%	19%
COFFEE	26%	35%	39%
CORN	41%	24%	35%
COTTON	32%	27%	41%
SOYBEAN OIL	46%	22%	32%
SOYBEANS	30%	28%	42%
SUGAR	38%	19%	43%
WHEAT	17%	20%	64%
WHEAT KC	37%	32%	31%
FEED CATTLE	17%	53%	30%
LEAN HOGS	18%	20%	63%
LIVE CATTLE	13%	24%	63%
WTI CRUDE OIL	59%	10%	31%
HEATING OIL	37%	16%	47%
GASOLINE	41%	20%	39%
NATURAL GAS	62%	10%	28%
GOLD	22%	55%	23%
SILVER	27%	46%	28%
AVERAGE	33%	27%	39%

Source: CFTC Commitments of Traders CIT supplement plus calculations

[4] For more information visit:
http://www.djindexes.com/mdsidx/?event=showAigHome for the DJ-AIG or for the S&P-GSCI
http://www2.standardandpoors.com/portal/site/sp/en/us/page.topic/indices_gsci/2,3,4,0,0,0,0,0,0,1,1,0,0,0,0,0.html

Index Component Weights
as of March 12, 2008

		S&P-GSCI	DI-AIG	Weighted Average
Agricultural	**Cocoa**	0.2%	0.0%	0.1%
	Coffee	0.6%	2.9%	1.5%
	Corn	3.3%	5.7%	4.2%
	Cotton	0.9%	2.5%	1.5%
	Soybean Oil	0.0%	2.9%	1.1%
	Soybeans	2.2%	7.2%	4.1%
	Sugar	1.0%	3.1%	1.8%
	Wheat	5.3%	5.6%	5.4%
	Wheat KC	1.2%	0.0%	0.8%
Livestock	**Feed Cattle**	0.3%	0.0%	0.2%
	Lean Hogs	0.8%	2.2%	1.4%
	Live Cattle	1.7%	3.9%	2.6%
Energy	**Brent Crude Oil**	13.4%	0.0%	8.3%
	WTI Crude Oil	38.3%	12.9%	28.6%
	Gasoil	5.0%	0.0%	3.1%
	Heating Oil	4.9%	3.8%	4.5%
	Gasoline	4.2%	3.6%	4.0%
	Natural Gas	6.8%	13.1%	9.2%
Base Metals	**Aluminum**	2.5%	7.7%	4.5%
	Lead	0.5%	0.0%	0.3%
	Nickel	0.9%	2.7%	1.6%
	Zinc	0.6%	2.7%	1.4%
	Copper	3.1%	7.3%	4.7%
Precious Metals	**Gold**	1.9%	7.1%	3.9%
	Silver	0.3%	3.0%	1.3%

Source: Standard & Poor's, Dow Jones

[5] "Investing and Trading in the GSCI," Goldman, Sachs & Co., June 1, 2005 and calculations based upon the CFTC Commitments of Traders Report, CIT Supplement, see the Appendix for more information on how to calculate Index Speculators' positions.

6

Commodity Futures Price Inreases
March 2003 - March 2008

Agricultural	**Cocoa**	+34%
	Coffee	+167%
	Corn	+134%
	Cotton	+40%
	Soybean Oil	+199%
	Soybeans	+143%
	Sugar	+69%
	Wheat	+314%
	Wheat KC	+276%
Livestock	**Feed Cattle**	+34%
	Lean Hogs	+10%
	Live Cattle	+23%
Energy	**Brent Crude Oil**	+213%
	WTI Crude Oil	+191%
	Gasoil	+192%
	Heating Oil	+192%
	Gasoline	+145%
	Natural Gas	+71%
Base Metals	**Aluminum**	+120%
	Lead	+564%
	Nickel	+282%
	Zinc	+225%
	Copper	+413%
Precious Metals	**Gold**	+183%
	Silver	+331%

Source: Bloomberg Financial Data

[7] The CFTC states on its website that "In many physical commodities (especially agricultural commodities), cash market participants base spot and forward prices on the futures prices that are 'discovered' in the competitive, open auction market of a futures exchange." - "The Economic Purpose of Futures Markets and How They Work," U.S. Commodities Futures Trading Commission, http://www.cftc.gov/educationcenter/economicpurpose.html

As an additional example, when Platts, an energy markets pricing service, surveys crude oil pricing in physical markets around the globe they are receiving bid and offer quotations from market participants expressed as WTI Light Sweet Crude minus a spread. - "Platts Oil Pricing and Market-on-Close Methodology Explained," Platts - a McGraw Hill Company, July 2007. http://www.platts.com/Resources/whitepapers/moc.pdf?a=i Note that if and when Platts receive price quotes as Brent Crude or Dubai Crude plus or minus a spread there is still a direct and stable relationship between WTI, Brent and Dubai.

[8] Please remember if demand for oil stays the same then prices will stay the same. If supply is constant then demand has to increase for prices to increase. That is why we examine increases in demand.

Increase In Chinese Demand For Petroleum
Last 5 Years

	CONSUMPTION (Barrels Per Year)	YEAR OVER YEAR CHANGE
2002	1,883,660,777	
2003	2,036,010,338	152,349,561
2004	2,349,681,577	313,671,240
2005	2,452,800,000	103,118,423
2006	2,654,750,989	201,950,989
2007	2,803,010,200	148,259,211
	TOTAL CHANGE	919,349,423

Source: Energy Information Association, US Department of Energy

[9] This table takes the numbers from the main table in the body of the statement and converts them to their barrel equivalents. The Petroleum consumption numbers that the DOE provides for Chinese consumption include all forms of petroleum both crude and refined.

Increase In Index Speculator
Demand For Petroleum
Last 5 Years

Petroleum Product	Barrels
WTI Crude Oil	538,499,579
Brent Crude Oil	144,524,265
Gasoil	44,122,619
Heating Oil	61,164,897
Gasoline	59,249,015
TOTAL CHANGE	847,560,374

[10] Energy Information Association - U.S. Department Of Energy. http://tonto.eia.doe.gov/dnav/pet/pet_stoc_wstk_dcu_nus_a.htm

[11] "The End Of Cheap Food," The Economist, December 6, 2007 http://www.economist.com/research/articlesBySubject/displaystory.cfm?subjectid=7216688&story_id=10252015

[12] "Ethanol Reshapes the Corn Market," Economic Research Service - U.S. Department Of Agriculture, Allen Baker and Steven Zahniser April 2006. http://www.ers.usda.gov/AmberWaves/April06/Features/Ethanol.htm

[13] "Ethanol Production Could Be Eco-Disaster, Brazil's Critics Say," Kelly Hearn, National Geographic News, February 8, 2007, http://news.nationalgeographic.com/news/2007/02/070208-ethanol.html

[14] Economic Research Service, U.S. Department of Agriculture, http://www.ers.usda.gov/Briefing/Wheat/consumption.htm

[15] see endnote #2

[16] Because the base metals are traded on the London Metals Exchange, Bloomberg did not have open interest data prior to 2005. Since prices and open interest expressed in contracts have been rising steadily the last five years we took 2005's base metal data and added it to 2004 actual numbers to come up with a conservative estimate for 2004 open interest. These are daily numbers averaged across the entire year.

Average Daily Dollar Value Of Open Interest

(in millions)	2002	2003	2004	2005	2006	2007	2008
COCOA	$ 1,815	$ 1,510	$ 1,569	$ 1,883	$ 2,040	$ 2,690	$ 4,062
COFFEE	$ 1,408	$ 1,693	$ 2,748	$ 3,769	$ 4,203	$ 6,308	$ 9,521
CORN	$ 5,435	$ 5,118	$ 8,182	$ 7,657	$ 15,059	$ 23,763	$ 37,427
COTTON	$ 1,646	$ 2,990	$ 2,645	$ 2,841	$ 4,259	$ 6,822	$ 11,689
SOYBEAN OIL	$ 1,441	$ 1,952	$ 2,456	$ 1,944	$ 3,186	$ 5,756	$ 8,868
SOYBEANS	$ 4,883	$ 7,306	$ 9,480	$ 8,846	$ 10,129	$ 20,882	$ 37,399
SUGAR	$ 1,521	$ 1,712	$ 2,772	$ 5,120	$ 8,634	$ 8,174	$ 15,509
WHEAT	$ 1,836	$ 1,862	$ 2,647	$ 3,827	$ 7,414	$ 11,608	$ 19,742
WHEAT KC	$ 1,304	$ 1,081	$ 1,240	$ 1,525	$ 3,099	$ 4,094	$ 6,253
FEED CATTLE	$ 540	$ 757	$ 804	$ 1,298	$ 1,518	$ 1,409	$ 1,818
LEAN HOGS	$ 602	$ 858	$ 1,873	$ 2,309	$ 3,285	$ 3,875	$ 4,465
LIVE CATTLE	$ 2,670	$ 3,595	$ 3,556	$ 4,859	$ 6,701	$ 7,909	$ 8,764
BRENT CRUDE	$ 6,556	$ 8,486	$ 12,620	$ 19,388	$ 31,094	$ 45,653	$ 52,832
WTI CRUDE	$ 16,052	$ 20,400	$ 33,620	$ 55,297	$ 80,996	$ 130,699	$ 199,970
GASOIL	$ 3,990	$ 3,695	$ 5,461	$ 10,196	$ 14,749	$ 21,006	$ 22,917
HEATING OIL	$ 4,412	$ 5,105	$ 8,242	$ 11,838	$ 13,575	$ 17,903	$ 23,854
GASOLINE	$ 3,714	$ 3,947	$ 7,304	$ 10,276	$ 11,366	$ 16,085	$ 24,213
NATURAL GAS	$ 23,551	$ 27,812	$ 25,897	$ 42,427	$ 45,067	$ 54,075	$ 72,834
ALUMINUM	$ 0	$ 0	$ 0	$ 12,286	$ 23,676	$ 27,589	$ 32,741
LEAD	$ 0	$ 0	$ 0	$ 677	$ 981	$ 2,226	$ 2,134
NICKEL	$ 0	$ 0	$ 0	$ 1,986	$ 4,415	$ 6,690	$ 6,608
ZINC	$ 0	$ 0	$ 0	$ 2,696	$ 6,759	$ 6,917	$ 6,428
COPPER	$ 0	$ 0	$ 0	$ 11,864	$ 26,516	$ 28,921	$ 32,717
GOLD	$ 5,639	$ 9,851	$ 13,221	$ 13,860	$ 18,929	$ 24,891	$ 43,700
SILVER	$ 1,976	$ 2,438	$ 3,745	$ 4,286	$ 6,447	$ 7,437	$ 12,935
TOTAL	**$ 90,991**	**$ 112,168**	**$ 150,082**	**$ 242,955**	**$ 354,097**	**$ 493,382**	**$ 699,400**

Source: CFTC Commitment of Traders and Bloomberg. Delta-equivalent options positions are included but spread positions are omitted. For Base Metals, Brent Crude and Gasoil open interest represents futures only. No data for Base Metals in 2002-2004.

[17] CIA World Factbook. https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html#Econ

[18] There is no publicly available data that shows inflow data for commodity indexation trading strategies but some approximations can be made. The end of year "investment" figures are published by the respective index companies (or they can be calculated) and the annual performance is known. Therefore the amount that the prior year's investment has grown or shrunk can be calculated. Then the difference in the yearly change has to come from net inflows. When during the year the inflows occurred is not known, so the assumption is made that all net inflows occurred evenly throughout the year. Changing assumptions on net inflow timing only affects the rate of growth for that year's inflow which never amounts to more than a few billion dollars difference.

Estimated Annual Inflows

	S&P-GSCI	DJ-AIG	TOTAL
2004	$16.2	$8.9	$25.1
2005	$4.8	$12.4	$17.2
2006	$28.3	$11.3	$39.6
2007	$14.7	$15.4	$30.1
2008	$35.1	$20.0	$55.1
TOTAL	$99.1	$68.0	$167.1

[19] ibid.

[20] This table is a good reference in comparing the differences between market participants.

Types Of Futures Market Participants

HEDGER	INDEX SPECULATOR	TRADITIONAL SPECULATOR
Sheds Price Risk	Takes On Price Risk	Takes On Price Risk
Hedges Underlying Position	Profits From Price Moves	Profits From Price Moves
Consumes Liquidity	Consumes Liquidity	Provides Liquidity
Price Sensitive	Insensitive To Price	Price Sensitive
Take Long And Short Positions	Long Only	Take Long And Short Positions

[21] "And that actually happened in 1991 with a particular swap dealer that was hedging an OTC transaction with a pension fund, and the swap dealer came to us, and we said, "yeah, that qualifies for a hedge exemption," so we granted a hedge exemption to the swap dealer. And in the years since then, we've done the same for other swap dealers, as well."
(Remarks of Don Heitman, Division of Market Oversight, CFTC Agricultural Advisory Committee Meeting, Washington, D.C., December 6, 2007)
(www.cftc.gov/stellent/groups/public/@aboutcftc/documents/file/aac_12062007.pdf)

[22] "Commodities: Who's Behind the Boom?," Gene Epstein, Barron's, March 31, 2008

[23] "Similar hedge exemptions were subsequently granted in other cases where the futures positions clearly offset risks related to swaps or similar OTC positions involving both individual commodities and commodity indexes. These nontraditional hedges were all subject to specific limitations to protect the marketplace from potential ill effects. The limitations included: (1) The futures positions must offset specific price risk; (2) the dollar value of the futures positions would be no greater than the dollar value of the underlying risk; and (3) the futures positions would not be carried into the spot month."
(72 FR 66097, Notice of Proposed Rulemaking, Risk Management Exemption From Federal Speculative Position Limits, , November 27, 2007.)
(http://www.cftc.gov/stellent/groups/public/@lrfederalregister/documents/file/e7-22992a.pdf)
(The language in 72 FR 66097 above also appears in 71 FR 35627, CFTC Request for Comments, Comprehensive Review of the Commitments of Traders Reporting Program, June 21, 2006.)
(http://www.cftc.gov/foia/fedreg06/foi060621a.htm)

[24] (72 FR 66097, Notice of Proposed Rulemaking, Risk Management Exemption From Federal Speculative Position Limits, , November 27, 2007.)
(http://www.cftc.gov/stellent/groups/public/@lrfederalregister/documents/file/e7-22992a.pdf)

[25] "CFTC Study Finds Independent-Moving Commodity and Equity Markets," December 19, 2007, http://www.cftc.gov/newsroom/generalpressreleases/2007/pr5425-07.html
http://www.cftc.gov/stellent/groups/public/@aboutcftc/documents/file/amarketofone.pdf

[26] Pension fund consultants have been advocating portfolio allocations of between 5% and 12% to commodities indices. Considering that worldwide institutional assets are about $29 trillion, if Institutional Investors heed the advice of their consultants, index replication could easily reach $1 trillion. $1 trillion on $29 trillion would represent an average allocation of just 3.5%.
"Investing In Collateralised Commodities Futures," Russell's Research For Excellence, Yvonne Ooi and David Rae, 2005
Strategic Asset Allocation and Commodities, Ibbotson Associates, Thomas M. Idzorek, March 27, 2006
Pension Funds $26 trillion : "UK pension fund returns at five-year low," IFAonline, Jennifer Bollen, January 28, 2008. http://www.ifaonline.co.uk/public/showPage.html?page=698204
Sovereign Wealth Funds $3 trillion : "Sovereign Wealth Funds," Council On Foreign Relations, Lee Hudson Teslik, January 18, 2008. http://www.cfr.org/publication/15251/

27 "WFP says high food prices a silent tsunami, affecting every continent," World Food Program - United Nations, April 22, 2008. http://www.wfp.org/english/?ModuleID=137&Key=2820

Testimony of Thomas J. Erickson, Chairman
The Commodity Markets Council
On Financial Speculation in Commodity Markets: Are Institutional Investors and Hedge Funds Contributing To Food and Energy Price Inflation?

Before the Committee on Homeland Security and Governmental Affairs
U.S. Senate

May 20, 2008

Mr. Chairman and Members of the Committee:

Good morning. My name is Thomas Erickson and I am the chairman of the Commodity Markets Council (CMC). I also serve as a vice president of government and industry affairs with Bunge.

Mr. Chairman and Ranking Member Collins, the issues you plan to address today are very important and I would like to thank you for hosting this hearing and for inviting CMC to participate.

CMC is a trade association that represents commodity futures exchanges, regional boards of trade, and numerous industry counterparts in the agriculture and energy businesses, including domestic and multinational commodity merchandisers, processors, millers, refiners, commercial and merchant energy companies, precious and base metal trading firms, and bioenergy producers; US and internationally-based futures commission merchants; food and beverage manufacturers; major transportation companies; and financial institutions.

Representing the complete spectrum of commercial uses of the agricultural and energy futures markets, the activities of our members range from grain and energy hedging by local country grain elevators to highly sophisticated, high-volume hedging activities supporting domestic and international grain and other agricultural product merchandising, exporting, and processing operations. The businesses of all our non-exchange member firms depend upon the efficient and competitive functioning of the risk management products traded on U.S. futures exchanges.

Examining The Role Of Institutional Investors And Hedge Funds In Commodity Markets

CMC views the investment activity of institutional investors and index funds as legitimate "financial hedging," but we recognize that it is passive in nature and not responsive to price levels or supply and demand fundamentals. In 2005 and 2006, CMC worked closely with the Commissioners and staff of the Commodity Futures Trading Commission (CFTC) to bring about a better industry understanding of the nature of index fund activity in futures markets. The result of this collaborative effort was the CFTC's

release of a new Commitment Of Traders (COT) Supplemental report showing index fund financial hedges as a separate and distinct category.

We believe the COT Supplemental Report provides much needed transparency to the market about the size and behavior of such investors. Despite being a relatively young report, it is already one of our industry's most essential tools for analyzing markets.

Although some organizations believe that the activities of large institutional investors in futures markets pose a threat, CMC believes that this is not necessarily the case. CMC recognizes that passive investment in the commodity markets may have had some price impact, but current evidence shows that market fundamentals generally support the current price levels seen in the futures markets.

The CFTC recently indicated that it will take a "go-slow" approach in expanding exemptions for this new class of investors. CMC supports this regulatory approach because it will allow the Commission and market users more time to thoroughly evaluate the potential this passively invested money may have on commodity markets. Given the many concerns in the commercial marketplace about convergence, CMC believes it is critical for market participants to have a clear idea and understanding of this new type of investor. It is important to note that this type of investment is new and different, but not necessarily bad.

Equally important is the distinction between passive investment and price-responsive investment. Typically index funds and institutional investors engage in passive investments. They take a position and hold it until a determined time. They do not change their position based on market movements. On the other hand, hedge funds tend to be more responsive to market signals and act as a traditional speculator. As such, hedge funds are subject to speculative limits which are appropriate.

In the last decade, futures markets, especially in the enumerated agricultural commodities, have grown immensely because of the relevance of their products to the commercial hedging, financial hedging, and general international and domestic trading communities – including hedge funds, index funds, and institutional investors. This increase in volume boosts liquidity, aids in price discovery, and enhances market efficiency.

Futures markets today reflect global economics and trends, not speculative buying power. Speculative activity in futures markets may influence day to day prices, but it is powerless in the face of larger, fundamental forces. If prices begin to retreat tomorrow, speculative activity will follow that retreat, not cause it.

Policy Recommendations To Consider

To address the concerns surrounding this new investor in commodity markets, CMC recommends:

1. Monitor Index Fund Positions. To maintain competitive markets, exchanges and the CFTC should continue to monitor index fund participation and be prepared, if necessary, to examine the structure of the hedge exemptions granted to the funds.

   In the agriculture futures markets, volume grew immensely in the last decade and the increased liquidity benefited all market participants. Fund investment contributed to this prosperity, and CMC believes that the CFTC and lawmakers should move slowly when adopting measures that will discourage such participation in the markets.

2. Continued Product Innovation. As the markets evolve and learn to adapt to the changing supply and demand dynamics, CMC would support legislation and regulations that allow exchanges to continue to innovate and create new products to manage risks.

3. CFTC Study Of Alpha Trading. CMC also recommends that the CFTC initiate a study of the trend toward "alpha" or "enhanced return" trading by index and hedge funds. Because this type of investment is price-responsive and not passively managed, CMC believes it is speculative in nature and should be reported as such on the CFTC COT Supplemental Report.

Margin Requirements

With crude oil prices moving higher and higher, CMC shares the concerns of many lawmakers. We are confident in the ability of CFTC professional staff to monitor and evaluate trading in energy markets, as well as their conclusions about the impact of speculation on prices in the energy futures markets.

CMC is concerned about a provision in the Consumer-First Energy Act of 2008 that would require the CFTC to set a "substantial increase in margin levels for crude oil." It appears the intent of the provision would be to lower prices; however, we believe that increased margin requirements would force many market participants off-exchange and into less transparent markets.

A margin payment, also called a performance bond, is the amount of money or collateral deposited by either a customer with a broker, a broker with a clearing member, or a clearing member with a clearing organization. A margin payment does not serve as a partial payment on a purchase, but rather serves to manage counter-party risk and ensure the financial integrity of the markets. Raising margin requirements will not reduce volatility or manage prices. It will increase the cost of futures transactions and potentially push speculative liquidity from the regulated exchange marketplace.

CMC Grain Futures Performance Task Force

With unprecedented challenges facing the US grain markets, CMC brought together exchanges and exchange-users to discuss futures market performance. The Task Force reviewed many market-related issues with the participants and the role of institutional investors and hedge funds was a significant point of discussion.

As CMC is still working to finalize our findings report, I can provide a general overview based on the dialogue the Task Force panel had with the participants. CMC will make the full report available to you as soon as it is complete.

The overriding concern expressed by participants is the financial impact of high commodity prices and increased price volatility – not futures market performance. Most market participants agree that current supply and demand fundamentals support high commodity prices. They do not believe that institutional investors or hedge funds are pushing price levels higher. Specifically, participants identified the following as the primary reasons for current price levels:

1. Strong economic growth in developing countries such as China and India resulting in increased demand for commodities.

2. Increased demand for commodities used for biofuel production and government mandates on biofuel use that result in inelastic demand for grains and vegetable oils.

3. Reduced yields in major producing regions due to weather events that are resulting in historically low world grain stocks-to-use ratios.

4. Export restrictions imposed by other nations.

5. A weakening U.S. dollar.

Meanwhile many grain and oilseed handlers face greater financial scrutiny as the sub-prime mortgage problems increase the pressure on lenders. This tighter credit creates an increased need for more consistent convergence between cash and futures markets.

Consistent convergence was the primary topic regarding technical futures market performance. While most participants agree that basis weakens in high price environments relative to more normal market conditions as grain and oilseed handlers' increased risk is incorporated in lower cash grain bids, participants still expect consistent basis strengthening as futures markets approach expiration. Some Task Force participants have disagreed on why convergence has been inconsistent – citing either insufficient storage charges on futures market receipts and certificates; index fund and/or speculative activity in the market; or the multitude of external shocks hitting the market. Most of those interviewed by the Task Force urged Exchanges to not make drastic changes until the markets adjust to this new operating environment.

The panel discussed a number of proposals that might improve convergence, but no broad consensus emerged from the process. Nonetheless, the largest number of participants generally supported increasing storage rates. Participants also supported seeking CFTC approval to clear OTC grain swaps.

In conclusion, we are in complicated times with supply and demand fundamentals shifting. CMC believes that markets are generally the most efficient filters of information and given time to respond, market participants will adapt.

Mr. Chairman, we compliment you and Ms. Collins for your efforts and we look forward to working with you. Thank you.

COUNCIL ON FOREIGN RELATIONS

58 EAST 68TH STREET • NEW YORK • NEW YORK 10065
Tel 212 434 9622 *Fax* 212 434 9875 *Email bsteil@cfr.org*
www.cfr.org

statement of

Dr. Benn Steil
Director of International Economics
Council on Foreign Relations

co-author of
Financial Statecraft (Yale University Press, 2006)

before the

Committee on Homeland Security and Governmental Affairs
United States Senate

May 20, 2008

Financial Speculation in Commodity Markets

Thank you Chairman Lieberman, Ranking Member Collins, and members of the Committee for the opportunity to present to you this morning my views on the causes of rising financial speculation in commodities markets.

The sharp recent rises in global commodities prices, particularly in the energy and agricultural sectors, are undoubtedly causing hardship for many Americans, and are indeed threatening the health of many millions in developing countries. There is also no doubt that these price rises have been accompanied by a corresponding rise in interest from institutional investors in commodities as an asset class. The value of commodity index investments, for example, has grown by about 1/3 since the beginning of the year, to more than $250 billion.

Certainly, much of this inflow is "speculative," in the sense that it is anticipating future supply constraints and robust demand. Both have been very much in evidence in recent years, and to the extent that speculation is driven by such factors it is playing a proper and indeed important role; that is, signaling the need to expand investment in production capacity, and providing liquidity to hedgers.

If this inflow is "manipulative," on the other hand, it should be a matter of immediate regulatory concern. But there is very little evidence that it is. Low and declining levels of inventory for major food crops, for example, indicate no potentially manipulative hoarding going on in that sector. In the crude oil futures market, the evidence suggests that changes in speculative

positions follow the reactions of commercial traders to relevant news, so that commercial rather than speculative position changes are driving price changes.

So-called "fundamental" factors, related directly to supply of and demand for specific commodities, can certainly account for a goodly portion of the run-up in prices in recent years.

The supply of global farm acreage and crop output is shrinking relative to a global population that is rising both in size and wealth.

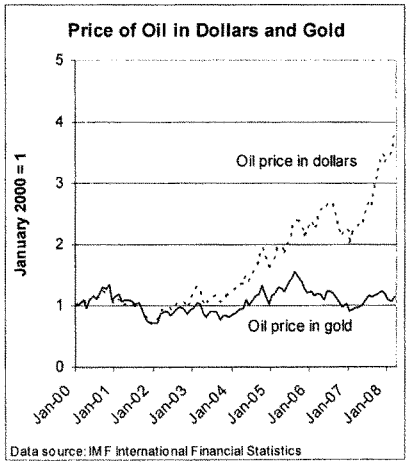
Rapidly growing demand from China is certainly part of the equation. Demand from China accounts for about 30% of the increase in crude oil demand over the past decade. A 6% rise in base metals demand last year was driven by a 32% increase in demand from China.

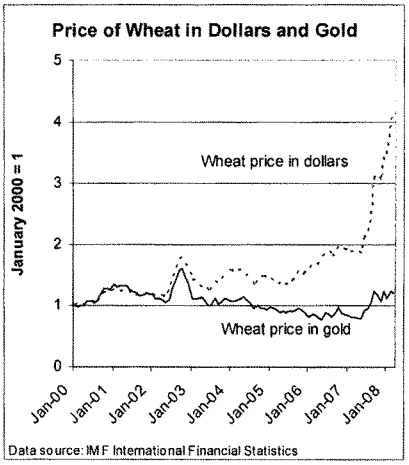
The tripling in oil prices since 2004 has spurred the production of biofuels, like corn-based ethanol, which has in turn contributed to record prices in corn and rival grains. These in turn have made products whose production relies on grain-based feed, such as milk and eggs, more expensive. This year, about 30% of US corn production will go into ethanol, rather than into world food and feed markets.

While all of these factors are acting to constrain supply or boost demand, governments around the world exacerbate these effects through public policy. Governments subsidize consumption of agricultural staples and energy products, for example, with the effect that demand does not moderate as it should. Governments have also been imposing agricultural export tariffs and bans, with the unintended consequence that farmers are motivated to reduce supply.

Yet all these fundamental factors, as important as they are, cannot explain the magnitude of price rises in recent years. The stories about global population growth and the rise of China, for example, are by now very old.

Many have recognized this, and have therefore asserted that we are experiencing a "commodities bubble." This conclusion, however, presumes that the US dollar, which the world uses to price and trade commodities, is a fixed unit of measurement, like an inch or an ounce. Yet it is not, and, worryingly, it has become less so in recent years. Whereas the prices of oil and wheat measured in dollars have soared over the course of this decade, they have, on the other hand, been remarkably stable when measured in terms of gold – gold having been the foundation of the world's monetary system until 1971.

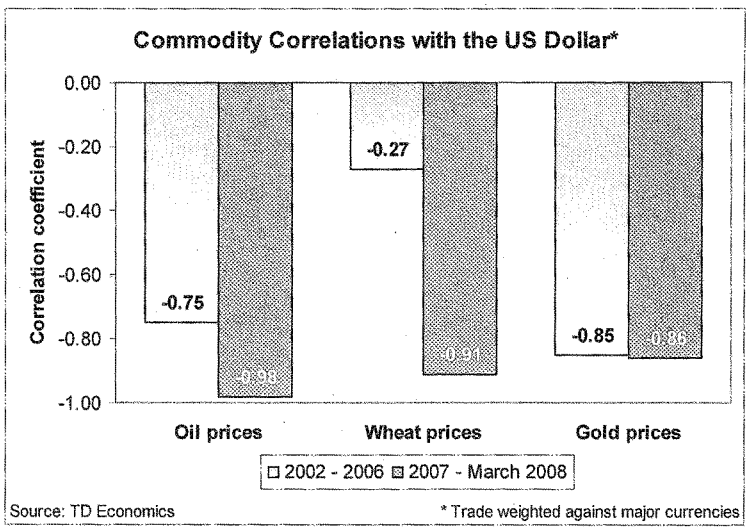




It is therefore reasonable to conclude not that we are a experiencing a commodities bubble, but rather the end of what might usefully be termed a "currency bubble."

The early 1980s witnessed the painful restoration of the global credibility of the dollar under the tight-money policy of the Paul Volcker-led Federal Reserve. We reaped the benefits of this achievement in the subsequent decade. The period of the 1990s through the early part of this decade was a golden age for the dollar. Investors around the world bought up dollar-denominated assets and central banks sold off their gold reserves, believing they were no longer necessary or desirable, allowing our country to enjoy the fruits of a sustained period of low interest rates and low inflation. But the Federal Reserve pushed rates too low and held them low for too long, and has since last autumn been exceptionally aggressive in driving them well below the rate of inflation. The Federal Funds Rate now stands at 2%, while consumer price inflation is near 4% and wholesale price inflation near 7%. More worrying, the latest survey from Reuters and the University of Michigan found that consumers' one-year inflation expectations have risen to 5.2%, up from 4.8% in April and 4.3% in March.

The dollar's value against the euro being tightly linked to the interest rate differential between the currencies, investors have shifted funds dramatically from low-yielding dollars to higher-yielding euros in recent years. Much more worrying, however, the correlation between dollar depreciation and commodities prices has become dramatically more pronounced since 2007, as illustrated in the figure below.



Institutional investors around the world – prominent among them, large US public pension schemes, such as CalPERS – have come to view commodities as part of a rapidly growing asset class devoted to inflation-protection.

Longer-term, governments themselves may actually fuel the upward commodities price trend by diversifying central bank reserves into commodities as a way to avoid precipitating further depreciation (vis-à-vis other currencies) of their existing huge stocks of dollar-denominated assets – in particular, US Treasurys.

What happens to commodities investment, and therefore commodities prices, going forward is therefore heavily dependent on the path of inflation and inflation expectations, and this path is itself critically dependent on developments in US monetary policy.

What policy measures, then, could help to relieve the damaging upward pressure on global commodities prices? I would identify two broad areas that merit attention.

First, we and other nations need to revisit honestly and objectively the range of subsidies and taxes we apply to encourage or discourage consumption and investment in the agricultural and energy sectors. The mix is far from optimal, and is becoming more damaging over time.

Second, more of the burden of dealing with the fallout from the mortgage and interbank credit crisis should be moved "on balance sheet." That is, Congress should look to targeted, explicitly funded, and market-oriented interventions to help revive the credit markets, which in turn will help revive the broader economy. To date, far too much of the burden has been borne by monetary policy, which is threatening to cause higher inflation, and leading individuals and institutions around the world to question whether the dollar will remain a credible long-term store of value. One highly undesirable result of this is soaring global commodity prices.

STATEMENT OF TOM BUIS, PRESIDENT
NATIONAL FARMERS UNION
BEFORE THE SENATE HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS COMMITTEE
CONCERNING: FINANCIAL SPECULATION IN COMMODITY MARKETS: ARE INSTITUTIONAL INVESTORS AND HEDGE FUNDS CONTRIBUTING TO FOOD AND ENERGY PRICE INFLATION?
MAY 20, 2008

Good morning, Mr. Chairman and members of the committee. I appreciate the opportunity to testify on behalf of the farm, ranch and rural members of National Farmers Union (NFU). NFU was founded in 1902 in Point, Texas, to help the family farmer address profitability issues and monopolistic practices while America was courting the Industrial Revolution. Today, with a membership of 250,000 farm and ranch families, NFU continues its original mission to protect and enhance the economic well-being and quality of life for family farmers and ranchers and their rural communities. We believe that consumers and producers can work together to promote a quality domestic supply of safe food.

Food is not an optional commodity for anyone, regardless of income demographics. As a farmer from Indiana and a national farm leader, I find it appalling that anyone in America, or the world, goes to bed hungry. America's farmers and ranchers have almost always produced a surplus of food commodities year in and year out. For the most part, food price increases are not about the lack of production, but other macro-economic factors including trade distortion, distribution and political decisions. I will outline the major factors impacting retail food items and outline concerns regarding recent activities in the commodity futures market.

Cause #1 – Energy Prices

Studies have shown that energy costs have twice the impact on retail food prices as the price of corn. A report by John Urbanchuk of LECG reports that a one dollar increase in corn results in a 0.3 percent increase in the consumer price index for food, whereas a one dollar increase in gasoline results in a 0.6 percent increase for food. With the average food item traveling more than 1,500 miles before reaching the final consumer, it is no wonder that food costs are increasing when looking back the last seven years; gasoline prices have increased 198 percent per gallon, diesel fuel prices have increased almost 250 percent per gallon and crude oil has increased 453 percent according to the Department of Energy's Energy Information Agency. A Merrill Lynch analyst estimates the biofuels industry is reducing gasoline prices by 15 percent per gallon today. The U.S. average price per gallon would increase $0.50, from $3.39 to $3.89 today without biofuels.

Cause #2 - Weather Related Production Shortfalls

In 2007, most major wheat growing regions experienced weather related production problems. The United States, Canada, Australia and Europe all experienced weather related production shortfalls at the same time. In response, wheat prices reached record levels and export demand skyrocketed, as world wheat stocks reached new lows. While some have blamed U.S. farmers for shifting wheat acreage to corn, it should be noted that very little U.S. wheat acreage is suitable for corn production. It takes more water to grow corn than wheat and most of the wheat acreage that could be converted to higher value commodities, such as corn or soybeans, long ago made the conversion. USDA's 2008 planting intentions indicate an increase in wheat acreage, as the higher prices are more economically favorable than other commodities.

Cause #3 - Weak Dollar and Export Demand by Emerging Economies
Today, the U.S. dollar's value has fallen to a 30-year low, according to USDA, as compared with other major currencies, which in turn makes the price of U.S. commodities increasingly competitive abroad. Since the value of the dollar was delinked from gold, we have witnessed the linkage between a weak dollar and higher commodity prices. Last year we saw record agricultural exports in terms of volume and value despite record high market prices. Total agriculture exports in 2007 amounted to a record of nearly $90 billion, an increase of $20 billion over 2006. At the same time, the value of agricultural imports is rising, on average 10 percent growth per year since 2001 according to USDA. With rapidly growing economies across the globe, a new demand has been created for food commodities. The new middle class populations in Asia, Latin America and Africa have demanded an improved diet including meat and dairy products.

Cause #4 - Speculators in the Commodity Markets
The committee has asked what effect institutional investors and hedge fund participation has had on current food and energy prices. My response is, we cannot fully know. NFU has called upon the Commodity Futures Trading Commission (CFTC) to conduct a thorough and comprehensive investigation regarding the recent activity of the commodities market and increase transparency in the commodity futures trading markets. Until the investigation is completed, NFU has urged CFTC to place a moratorium on any new commodity index trading.

Remarks from CFTC officials that the activity in the market is responding to fundamentals is frustrating, at minimum because some farmers have been precluded from utilizing financial risk management tools. I have heard from numerous farmers that they can no longer forward price their commodities for delivery after harvest any more than 60 days in advance. As you can imagine, it is very frustrating for farmers who are paying record amounts in input costs to produce a crop, but cannot capitalize on the higher commodity prices to protect their financial risk. Meanwhile, we continue to read newspaper articles or watch television reports that say farmers are getting rich because of the record high commodity prices, which could not be further from the truth.

I have heard from numerous farmers and grain elevators around the country, including one Kansas grain elevator that contracted wheat from farmers for delivery after harvest last fall at $7.00 per bushel. When the speculative money poured into the futures market and prices skyrocketed to record highs this winter, that Kansas grain elevator was forced to pay $0.60 per bushel in margin calls, totaling $600,000 per day. It does not take long with margin calls such as these, for local elevators to reach their credit limit and stop offering contracts to farmers. The market intended to provide producers a risk management tool was not functioning.

Another example of the dysfunctional market is what happened in the cotton futures market when the price almost doubled in one day. When producers tried to market their cotton at the higher price, they were told there was no market for the physical commodity and the price collapsed shortly thereafter. We have yet to receive a satisfactory explanation from CFTC officials as to what caused this situation. Obviously it was not based upon market fundamentals and again farmers were precluded from being able to capture the higher prices.

A similar scenario played out in 2006 when the Amaranth hedge fund lost $2 billion in natural gas derivatives, eventually going bankrupt. The Senate Permanent Subcommittee on Investigations found in a June 2007 report that Amaranth evaded limits on the size of speculative positions by moving its

trading from NYMEX to exempt and unregulated markets. Amaranth's speculation caused significant price movements prior to its demise. When Amaranth failed, unexpected declines in price occurred. This same fact pattern can occur in agricultural markets. And, farmers, who have been denied the protective tools the commodity markets are supposed to provide, will be the ones taking the fall.

Producers are very concerned with the lack of transparency within the market functions. As a result NFU has called for CFTC to evaluate the role and impact over-the-counter (OTC) trading and swaps are having on the markets. Without a full understanding of these trades or their impact, it is impossible to say that manipulation of the commodity markets is not occurring. NFU supports the proposal to clear swaps in certain OTC positions in an effort to create more transparency into the markets. It is my opinion that CFTC authority needs to be strengthened in order to ensure the regulators know exactly what is happening in the marketplace. As long as parts of the trading are not in regulated markets or reportable markets, how can anyone say with certainty that the markets are performing their function of price discovery?

We have witnessed the results of unclosed loopholes in the regulatory process of futures trading. The recently passed farm bill addresses one of the loopholes, which allowed energy futures trading on unregulated international markets. NFU was pleased that the "Enron Loophole", which both Enron and Amaranth used to manipulate energy prices, will now be closed. NFU had previously endorsed the "Close the Enron Loophole Act" so as to provide CFTC regulatory oversight of energy futures trading and address the volatile energy derivatives futures market. The Enron scandal is a perfect example of what an opaque marketplace means for the American public and stresses the importance of including this important legislation within the farm bill. Other positive steps taken within the farm bill include increasing the criminal and civil penalties for market manipulation and strengthening CFTC's authority over retail foreign currency transactions. I hope CFTC will not be afraid to use this new authority.

In public comments filed with CFTC, NFU expressed opposition to any increases in the speculative position limits as proposed by the Commission in 2007. The speculators have an important role to play in the commodity markets in terms of function, but unabated activity has negated that role and should not be allowed at the expense of farmers and traditional users of the markets. We are in unchartered waters today with the involvement of speculators in our markets and I believe it warrants a review from CFTC or third-party objective entity.

NFU believes that CFTC needs to take a broader look at the concept of manipulation. Unfortunately, CFTC's test to determine manipulation requires that an individual or group of traders acquire a market position that enables them to *consciously* distort prices in noncompliance with market fundamentals. What CFTC is failing to recognize is that the deluge of money from Wall Street and hedge funds in and of itself is driving prices artificially high in a potentially destructive manner. It is still manipulation, if only in a slightly different sort.

In summary, if CFTC officials are correct and there is nothing wrong with the markets' function, why are some farmers precluded from participating? Exactly how much institutional and investment money is being invested into the commodity markets? What happened in the cotton case? These are unanswered questions that cannot be left ignored. Without a properly functioning and regulated futures market, a train wreck is headed straight for rural America that will jeopardize our ability to continue providing a safe, affordable and abundant food supply for this nation.

I thank the committee for the opportunity to be here today and look forward to any questions you may have.

Written Testimony of
Acting Chairman Walter Lukken
Before the Senate Committee on
Homeland Security and Governmental Affairs
June 24, 2008

Chairman Lieberman, Ranking Member Collins, and other distinguished Members, thank you for inviting me to testify before this Committee on the role, responsibilities, and resources of the Commodity Futures Trading Commission (Commission or CFTC).

During the last few years, the futures markets have changed dramatically in size and complexity, experiencing 500 percent growth in both volume and products listed. Once member-owned and dominated by open-outcry trading, today exchanges are technology-driven corporations that primarily trade electronically, 24 hours a day, all around the globe. Approximately $5 trillion of notional transactions flow through these U.S. exchanges and clearing houses daily. This description alone would make the oversight of these markets a challenge for regulators. But add to it the sub-prime crisis, record energy and agricultural commodity prices, the influx of financial funds in futures, and historic low staffing levels at the CFTC, and it is clear that these are challenging times for this agency.

Recent substantial increases in the price of crude oil and other commodities have had a significant impact on American consumers and have put considerable strain on U.S. households. These issues are a matter of intense focus at the Commission due to the key role that futures markets play in the price discovery process. The CFTC shares the concerns of Americans and Congress, and we are committed to ensuring that our nation's futures markets operate fairly and efficiently, and that the prices of commodities, including crude oil, are determined by the fundamental forces of supply and demand, rather than abusive or manipulative practices.

The CFTC recognizes that these markets and their participants have evolved significantly in the last several years. Concerns have been raised recently regarding the role of speculators and index traders in the commodity markets. As prices have escalated, the CFTC has pursued an active agenda to ensure that the commodity futures markets are operating free of distortion as the agency looks to better understand the implications of these structural market developments. The Commission has undertaken several initiatives directed to enhancing the oversight of the energy and agricultural markets. These initiatives fall into five broad categories: 1) Increasing Information and Transparency, 2) Ensuring Proper Market Controls, 3) Continuing Aggressive Enforcement Efforts, 4) Improving Oversight Coordination, and 5) Seeking Increased Funding.

1) Enhancing Information and Transparency.

The proper oversight of markets requires transparency. Market regulators must receive the necessary information to conduct surveillance of market activity, study long-term financial trends, and evaluate policy changes as circumstances evolve. The backbone of the CFTC's market surveillance program is the large trader reporting system, through which the CFTC receives daily data showing all large traders' futures and options positions in the markets. This information enables the CFTC's surveillance economists to oversee all traders of size to ensure that no one is attempting to manipulate the futures markets. This amount and detail of trade data collected and analyzed at the CFTC is unprecedented among financial regulatory agencies.

As markets have become electronic and global, the CFTC has been working to expand and enhance its technology and trade data collection to accommodate these trends. Last spring, the CFTC announced a major technology purchase that will modernize our trade practice surveillance system to enhance basic trade surveillance and permit nearly real-time analyses of all trading activity. Investments in technology are critical for the CFTC to sort through the millions of pieces of information generated by these electronic markets daily.

The CFTC is also working to increase the amount and quality of the trader data we receive from the markets. In late May, the CFTC announced an agreement with the U.K. Financial Services Authority (FSA) to expand the trader data received from ICE Futures Europe on its cash-settled light sweet crude oil contract that settles off the NYMEX benchmark crude oil contract. When first listed in 2006, this linkage between the two contracts caused the Commission and its

surveillance staff to be concerned that regulators would not be able to observe the entirety of a trader's position in both markets. Once the surveillance issue was identified, the CFTC worked with its foreign counterpart, the FSA, to share large trader data for these linked contracts to ensure that traders were not gaming one market to influence the other. At that time, the CFTC's agreement with the FSA provided the CFTC with weekly trader information, and daily information in the final trading week, to facilitate the ability of the CFTC and FSA to oversee trading in these related contracts.

Building on these efforts, the CFTC and FSA two weeks ago announced an expanded information-sharing arrangement, including: 1) providing daily large trader positions in the linked ICE Futures Europe crude oil contract, 2) extending trader information sharing to all contract months, 3) a near-term commitment to improve the identification of market end users to be completed within two months, 4) improved formatting so trading information can be seamlessly integrated into the CFTC's surveillance system, and 5) CFTC notification when traders exceed NYMEX position accountability levels. This cross-border information sharing is unprecedented among global regulators.

The CFTC also has taken action to improve the transparency of index traders and swap dealers in the energy markets. There is public concern about the amount of index money flowing into the futures markets. Pensions, endowments, and other long-term investors increasingly are investing a portion of their portfolios in a broad mix of commodities in order to diversify their holdings and reduce volatility and risk. Unlike traditional speculative trading by hedge funds and other managed money, index investors are typically non-leveraged entities utilizing a long-term buy–and-hold strategy. Most of this type of investment comes through major Wall Street swap dealers that sell their clients broad exposure to the commodity markets through an over-the-counter commodity index contract. Swap dealers then are exposed to commodity price risk as a result of aggregating these transactions and must utilize the futures markets to manage their own remaining residual risk. This "netting out" of risk by swap dealers before coming to the futures markets makes it difficult for regulators to determine the total amount of index trading occurring in the energy markets.

As a result, the Commission decided to issue special calls for information about commodity index trading, principally to swap dealers through whom most of this trading takes place in the over-the-counter (OTC) market. Some market commentary has pointed to long-only index trading as part of the reason for the sharp increases in energy prices. Through its large trader reporting system, the Commission has highly accurate information on all swap dealer positions in all regulated U.S. futures markets, including energy futures markets. However, swap dealers' futures positions can represent hedges of very complex "books" of many different types of OTC derivative and cash transactions. Therefore, swap dealers' futures positions do not necessarily correspond accurately with the amount of index trading that is occurring in the OTC market. In order to better understand the extent and possible impact of index trading, the Commission has issued special calls to swap dealers requiring them to provide information on commodity index transactions.

After analyzing this data, the Commission and its staff will provide a report to Congress by September 15, 2008 regarding the scope of commodity index trading in the futures markets and recommendations for improved practices and controls, should they be required.

2) Ensuring Proper Market Controls.

Last fall, the Commission announced its intention to address the mounting regulatory concerns surrounding exempt commercial markets that trade over-the-counter energy products. The Commission held a public hearing and worked with Congress to enact legislation as part of the Farm Bill requiring exempt commercial markets that trade contracts linked to regulated U.S. futures contracts to provide the CFTC with large trader reports and impose position and accountability limits on such products. Congress and this agency believed that these authorities were necessary to protect the regulated energy marketplace.

As noted earlier, linkages between contracts are not purely a domestic occurrence but also happen across international borders. Most energy and agricultural commodities are global commodities operating in a global marketplace, and the U.S. futures markets have been facing the challenges of cross-border trading and regulation for many years.

For more than a decade, the CFTC has worked to develop international regulatory networks, to increase international cooperation, and – most importantly – to maintain and improve oversight of U.S. futures markets in the face of increasing globalization. Over the years, the CFTC has developed a mutual recognition process that strikes the balance between the need for U.S. regulators to maintain confidence in the functioning and integrity of our markets, and the acknowledgement that the increased globalization of commodity markets requires international cooperation and coordination.

With this balance in mind, the CFTC last week announced modifications to its Foreign Board of Trade process. After consultation with the British FSA, the CFTC conditioned ICE Futures Europe's direct access to U.S. customers on implementation of position and accountability limits on its linked crude oil contract. In addition, ICE Futures Europe will adopt hedge exemption requirements similar to those in the U.S. and report any violations of those requirements to the CFTC. The CFTC has amended ICE Futures Europe's direct access letter to reflect this change. The CFTC will also require other foreign exchanges that seek such direct access to provide the CFTC with comparable large trader reports and to impose comparable position and accountability limits for any products linked with U.S. regulated futures contracts. This combination of enhanced information data and additional market controls will help the CFTC in its surveillance of its regulated domestic exchanges while preserving the benefits of a mutual recognition program that has enabled proper global oversight over the last decade.

The amended direct access letter also formalizes the recently announced information-sharing agreement between the CFTC and the FSA by requiring ICE Futures Europe to provide the CFTC with detailed market information, equivalent to U.S. standards for market surveillance, as a condition of receiving direct access to U.S. customers. The CFTC will incorporate this new data into the CFTC's Commitments of Traders Report, which is a weekly report categorizing traders and positions.

The Commission's staff intends to apply these new direct access conditions to any future requests by foreign exchanges for direct access to U.S. customers, where the exchange in question lists a contract that settles against contracts listed on any U.S. exchange. These revisions to the foreign board of trade program will provide the CFTC with additional oversight

tools to monitor linked contracts. This combination of enhanced trading data and additional market controls will help the CFTC in its surveillance of regulated domestic exchanges, while preserving the benefits of our international mutual recognition program, which has permitted cross-border oversight of global markets over the last decade.

3) Continuing Aggressive Enforcement Efforts.

During these turbulent market conditions for crude oil, the environment is ripe for those wanting to illegally manipulate the markets and, as a result, the Commission has stepped up its already aggressive enforcement presence. In late May, the Commission took the extraordinary step of disclosing that in December 2007, its Division of Enforcement launched a nationwide crude oil investigation into practices surrounding the purchase, transportation, storage, and trading of crude oil and related derivatives contracts. Although the Commission conducts its enforcement investigations in full confidentiality, today's unprecedented market conditions and the desire to maintain public confidence justified disclosing the existence of this investigation.

Since December 2002 to the present time, the Commission has filed a total of 39 enforcement actions charging a total of 64 defendants with violations involving the energy markets. The agency has assessed almost half a billion dollars in civil monetary penalties in settlement of these enforcement actions. The Commission also has achieved great success in this area by working cooperatively with the Department of Justice on over 35 criminal actions concerning energy market misconduct. Strong enforcement is imperative during this time.

4) Improving Oversight Coordination.

Given the CFTC's size and the enormity of the global marketplace, the CFTC must engage others in government as we seek to meet our important mission. Last week, the CFTC announced the formation of a CFTC-led interagency task force to evaluate developments in the commodity markets. The task force – which includes staff representatives from the CFTC, Federal Reserve, Department of the Treasury, Securities and Exchange Commission, Department of Energy, and Department of Agriculture – is examining investor practices, fundamental supply and demand factors, and the role of speculators and index traders in the commodity markets. It is intended to bring together the best and brightest minds in government to aid public and

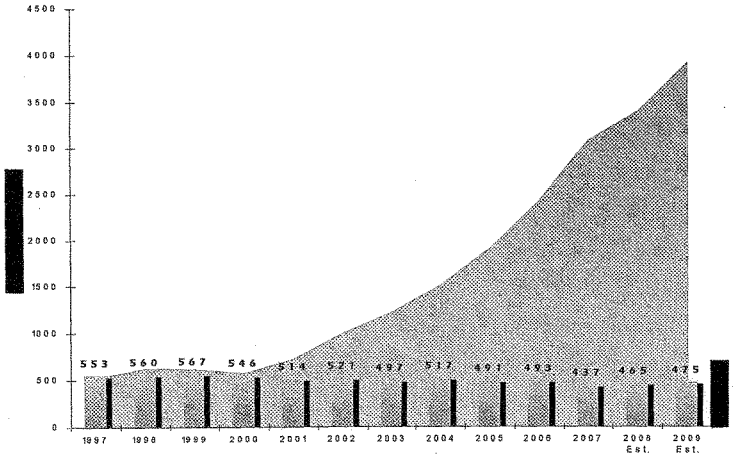
regulatory understanding of the forces that are affecting the functioning of these markets. We convened the first meeting last week and will strive to complete this work quickly and make public the results.

The CFTC also recently hosted its second international enforcement conference – a two day event focusing on global trading in the energy markets with senior enforcement officials from 10 countries. Our goal was to enhance the ability of the CFTC and its fellow regulators to detect and deter misconduct affecting commodity prices in the energy sector, and I am confident that it was a success that will bear the fruit of coordinated international enforcement for manipulation.

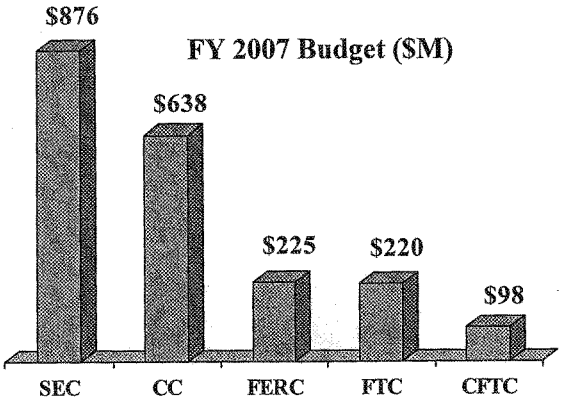
5) Seeking Increased Funding.

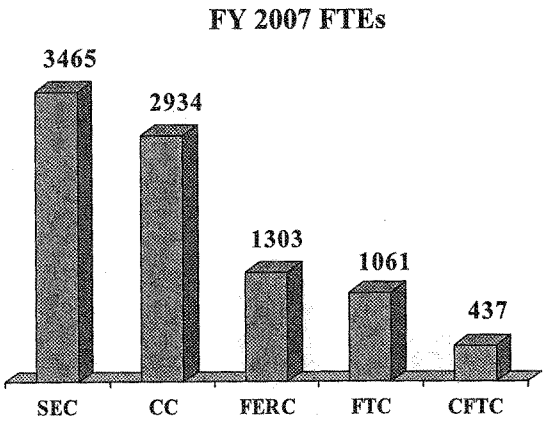
If the CFTC sounds busy, it is—especially given that the agency's staffing levels are near record low numbers. Since the CFTC opened its doors 33 years ago, the volume on futures exchanges has grown 8,000 percent while the CFTC's staffing numbers have fallen 12 percent. The following chart shows the exponential growth in contract volume, compared to CFTC staff numbers.

Growth in Volume of Futures & Option Contracts Traded
& CFTC Staffing Levels



The CFTC's resources simply have not kept pace with the growth of the markets and the growth of similar financial regulators. As you can see, the CFTC lags other comparable agencies in funding levels by substantial margins. This agency's lack of funding over the course of many years has had a negative impact on our staffing situation, rendering it unsustainable for the long run.





The CFTC is a small agency doing an extraordinary job under difficult circumstances. The dedicated and skilled individuals at the CFTC are working tirelessly to ensure the integrity of the markets. However, as the agency embarks on new authorities and initiatives in order to respond to changing market conditions, it is imperative that the CFTC receive additional funding.

The CFTC is in the midst of implementing its new Farm Bill authorities, which require many programmatic changes and plain old hard work from a staff that is already under significant strain. Additionally, the agency's staff is racing to implement the many recent agency initiatives I outlined earlier in my testimony. Recall as well that our employees are also full-time regulators, charged with overseeing these markets each and every day, upholding the agency mission to safeguard the futures markets. Given our staffing numbers, the agency is working beyond its steady state capacity and is unable to sustain the current situation for much longer without being forced to make Hobson's choices about which critical projects should be completed and which ones will be delayed. And while we welcome discussions of any appropriate and necessary legislative or agency changes, our agency is clearly unable to accommodate additional tasks at our current resource and personnel level.

Last Tuesday, I testified at a joint hearing of the Senate Appropriations and Agriculture Committees to support the Commission's request for additional appropriations from Congress. In making this request, the Commission was mindful of the need to maintain fiscal restraint in appropriations and the competing needs of other parts of the Federal Government. However, we believe that the proposed funding level of $157,000,000 is the appropriate level of resources required to fulfill our immediate responsibilities. The increase will restore staffing to a level last sustained almost two decades ago when market volume, innovation, and complexity were significantly less than today and when the agency did not yet have to face the expanded workload brought on by globalization of the marketplace and the emergence and widespread use of derivatives and hedge funds. This of course means the Commission is now doing much more with less and continues to deliver a good return on investment for the American taxpayer. The Commission's ratio of workload to resources has always been lean compared to other financial regulators. But we have reached our limit and cannot uphold our mission without immediate additional resources.

In summary, I want to thank the Committee for inviting me to testify today. The Commission shares the Committee's concern for current conditions in the energy markets and for the effects of high crude oil and gas prices on American consumers, workers, and businesses. These are difficult times in the futures markets, and the Commission recognizes the need to respond accordingly. As I stated in my earlier testimony – and it bears repeating given the challenges of the last several weeks – I am deeply proud of our highly skilled and productive staff. This small Federal agency is working hard to protect the public and the market users from manipulation, fraud, and abusive practices in order to ensure that the futures markets are working properly.

Thank you for the opportunity to appear before you today on behalf of the CFTC. I would be happy to answer any questions you may have.

Testimony of
Dr. James Newsome, President and CEO
New York Mercantile Exchange, Inc.
before the Committee on Homeland Security and Governmental Affairs

June 24, 2008

Mr. Chairman and Members of the Committee, my name is Jim Newsome and I am the President and Chief Executive Officer of the New York Mercantile Exchange, Inc. (NYMEX or Exchange). NYMEX is the world's largest forum for trading and clearing physical-commodity based futures contracts, including energy and metals products, and has been in the business for more than 135 years. NYMEX is a federally chartered marketplace, fully regulated by the Commodity Futures Trading Commission (CFTC or Commission) both as a "derivatives clearing organization" (DCO) and as a "designated contract market" (DCM), which is the highest and most comprehensive level of regulatory oversight to which a derivatives trading facility may be subject under current law and regulation.

On behalf of the Exchange, its Board of Directors and shareholders, I want to express our appreciation to the Committee for holding this hearing and addressing the issue of "Ending Excessive Speculation in Commodity Markets: Legislative Options." The ever increasing cost of energy touches all aspects of our daily lives and today is quite possibly the most important issue facing global and domestic economies as well as U.S. consumers. Highlighting the urgency of the matter, no fewer than seven bills have been introduced in the House and Senate over the last few weeks on this very topic. We applaud the Committee's

decision to thoroughly evaluate the many facets of this topic by inviting a diverse group of panelists who can provide a broad array of opinions to the discussion.

BACKGROUND

The Commodity Futures Modernization Act of 2000 (CFMA) was the premier legislative vehicle that transformed the regulation of derivatives markets in two important ways. The CFMA: 1) established flexible core principles to allow regulated exchanges to compete effectively with the growing over-the-counter (OTC) markets and foreign markets and; 2) provided legal certainty to financial and energy swaps. The CFMA, as anticipated, ushered in a period of phenomenal growth in the derivatives markets and has proven to be the gold standard of U.S. financial policy. As Acting Chairman and then Chairman of the CFTC from 2001-2004, I was involved in the implementation phase of this landmark piece of legislation.

The CFMA significantly enhanced the competitiveness of U.S. markets by allowing them to adapt readily to changing market demand, and, for the most part, the value and success of the CFMA holds true today. However, no one had a crystal ball back then and it was impossible to know then what we know now about how some markets would develop. In at least two instances, markets have developed differently than anyone could have anticipated at the time.

First, an OTC natural gas contract began trading on an unregulated exempt commercial market (ECM) that mirrored the regulated exchange-traded natural gas futures contract and the two contracts became intricately linked. Over time, the volume on the ECM contract grew substantially, and an arbitrage

market developed between the two markets. Ultimately, the OTC contract began to serve a price discovery function. Thus, ECMs began to function more like a traditional exchange and market participants easily moved positions from the regulated exchange to the ECM to avoid regulatory requirements such as position limits, a strategy that contributed to the collapse of Amaranth. This scenario was investigated by the Senate Permanent Committee on Investigations chaired by Senator Carl Levin. (NYMEX cooperated in this investigation.) Ultimately, this situation was addressed effectively in an amendment to the recently adopted Farm Bill.

Second, non-U.S. exchanges (also referred to as foreign boards of trade (FBOT)), which were permitted by CFTC staff to offer their products to U.S. customers pursuant to CFTC no-action letters, began listing futures contracts with U.S. delivery points among their product slates. Historically, under the FBOT CFTC staff no-action process, such exchanges were permitted to offer direct electronic access to their markets to U.S. customers based on a determination by CFTC staff that the foreign regulatory regime governing the FBOT was "comparable" to that of the CFTC.

Essentially, there is a system of mutual recognition among regulators around the world as a means to facilitate access to global markets. This approach worked effectively up until a FBOT listed the look-alike of the NYMEX West Texas Intermediate (WTI) Crude Oil Futures contract without the level of transparency and market surveillance controls such as positions limits that are provided by U.S. markets under direct CFTC regulation. It was not anticipated

that the no-action process would be used in this manner, which has effectively diminished the transparency to the CFTC of approximately one-third of the WTI crude oil market, and permitted an easy avenue to circumvent position limits designed to prevent excessive speculation.

FOREIGN BOARDS OF TRADE AND TRANSPARENCY

NYMEX has advocated for greater transparency of futures activity linked to U.S. exchanges occurring on markets regulated by foreign regulators for two years. Complete transparency to the CFTC should be a fundamental requirement for markets that are linked. In this connection, we have argued that FBOTs offering these linked products should be required by the CFTC to provide the same level and quality of data and at the same frequency that U.S. exchanges provide to the CFTC on a daily basis.

In addition, we believe that no action letters for FBOTs offering contracts with U.S. delivery points should be conditioned to impose position limits and/or accountability levels. This would be a positive step and would provide an effective mechanism to restrict speculative activity in those markets. This is particularly important when the contract trading on the FBOT is the WTI crude oil contract, which is a benchmark for crude oil pricing, and which can have a substantial impact on U.S. consumers and the U.S. economy. Indeed, we would support the imposition of position limits even for listed contracts that are financially settled. We applaud the CFTC's recently issued press release that advised that the CFTC is now imposing position limits on ICE Futures Europe as a condition of the no-action relief.

In this regard, approximately one year ago, a new futures exchange, the Dubai Mercantile Exchange (DME), commenced operations in Dubai. NYMEX is a founder and has an ownership share in this venture and provides clearing services for the new exchange. The core or flagship crude oil futures contract is an Oman Sour Crude Oil futures contract. The DME initiative provides competition and greater transparency to crude oil trading in a critically important energy region. Although the DME does not yet list a WTI financial futures contract, the DME has received a no action letter from the CFTC staff for this contract and NYMEX received an approval of an amendment to its Clearing Order allowing our exchange to clear positions.

The DME is currently finalizing a launch date for that contract. It is our understanding that, when a launch date is finalized on the DME WTI contract, DME will implement hard position limits that are comparable to NYMEX's own limits on our WTI crude oil futures contract. Also, as part of the NYMEX Clearing Order, large trader reporting to both the CFTC and NYMEX is required.

In a more recent initiative, NYMEX has entered into an alliance with a London-based clearinghouse, LCH.Clearnet Limited (LCH), under which LCH will provide clearing services for two new product slates to be launched later this summer either by NYMEX or by a NYMEX affiliate. These new product slates are intended to provide greater competition to other energy trading facilities that are active in this energy space. One product slate, focusing upon natural gas and electricity contracts, will be listed by a division of NYMEX in the exempt commercial market tier. Applicable products in this category will comply fully with

the requirements for significant price discovery contracts contained in the recently implemented CEA Reauthorization Farm Bill. The other product slate, focusing upon crude and crude products, will be listed for trading by a NYMEX affiliate based in London that will be regulated by the U.K. Financial Services Authority. While that affiliate will follow the path of other exchanges regulated by other regulators and will be applying for CFTC no-action relief, this affiliate will provide large trader reporting to the CFTC and also will impose hard position limits on any listed contracts with U.S. delivery points.

SPECULATION

Speculative activity on futures exchanges is managed by position limits. As stated in the CFTC's rules, position limits and accountability levels are required "to diminish potential problems arising from excessively large speculative positions." These limits effectively restrict the size of a position that market participants can carry at one time and are set at a level that greatly restricts the opportunity to engage in possible manipulative activity on NYMEX. For the NYMEX WTI crude oil contract, the position limit during the last three days of the expiring delivery month is 3000 contracts. Breaching the position limit can result in disciplinary action being taken by the Exchange.

Many believe that speculators, particularly index funds and other large institutional investors in our markets are responsible for the high price of crude oil. However, data analysis conducted by our Research Department confirms that the percentage of open interest in NYMEX Crude Oil futures held by non-commercial participants relative to commercial participants actually decreased

over the last year even at the same time that prices were increasing. In addition, non-commercials are relatively balanced between long (buy) and short (sell) open positions for NYMEX crude oil futures.

Thus, non-commercial participants are not providing disproportionate pressure on the long (buy) side of the crude oil futures market. In fact, with regard to the data relating to the activity of swap participants since October 2007, these data provide a very different result. This is a key finding; a closer analysis of such data, including data obtained from the CFTC, reveal that swap dealers participating in our markets were in fact holding overall net short (sell side) positions. In other words, unlike the public posturing of those who blindly assert that swap dealers are providing upward pressure on price, the simple reality is that any price impact that may be attributable to their open positions would be to lower prices somewhat and not to raise them.

We also reviewed the percentage of open interest in the NYMEX Crude Oil futures contract held by non-commercial longs and shorts relative to that held by commercial longs and shorts from 2006 to the present. Commercial longs and shorts consistently have comprised between 60 and 70% of all open interest.

We have seen various representations made relative to participation by speculators in our markets that directly contradict our data. One such representation claims that 70% of our crude oil market is made up of speculators. That analysis incorrectly assumes that all swap dealers are non-commercials and that all of their customers who would be on the opposite side of any energy swap that they might execute would also all be non-commercials. This is simply not

the case. However, this confusion clearly highlights the need for the CFTC large trader data to delineate for energy futures the degree of participation by non-commercials in the same manner that such data are now being delineated for agricultural contracts.

NYMEX also maintains a program that allows for certain market participants to apply for targeted exemptions from the position limits in place on expiring contracts. However, such hedge exemptions are granted on a case-by-case basis following adequate demonstration of bona fide hedging activity involving the underlying physical cash commodity or involving related swap agreements. A company is not given an open-ended exemption, and the exemption does not allow unlimited positions. Instead, the extent of the hedge exemption is no more than what can be clearly documented in the company's active exposure (as defined by the CFTC) to the risk of price changes in the applicable product. In a number of instances, hedge applications are either reduced in number or are denied because of staff's overriding focus on maintaining the overall integrity of our markets.

A vast amount of attention is focused on speculative activity and what, if any, influence speculators are having on current market prices and volatility. In order to determine accurately whether speculative activity is influencing the market, the data must be complete and accurate. Recently, a potential gap was identified in the large trader data compiled by the CFTC in its Commitment of Trader's Report. Specifically, questions are being raised as to whether hedge

exemptions for swap dealers are being used as a means of circumventing speculative position limits.

At this time, due to the manner in which the data are reported, it is not clear whether this is true or not. In response to these queries, the CFTC announced its intent to develop a proposal that would routinely require more detailed information from index traders and swaps dealers in the futures markets, and to review whether classification of these types of traders can be improved for regulatory and reporting purposes. NYMEX believes that it will be useful to the development of thoughtful public policy for the CFTC to obtain more precise data so as to better assess the amount and impact of this type of trading on the markets.

MARKET FUNDAMENTALS

NYMEX strongly believes that greater transparency is needed and that data on participation of swap dealers and index funds must be improved in order to effectively monitor these markets and accurately assess what is or is not influencing the price. In addition, we continue to believe that market fundamentals are the most important factor in the current market. Currently, uncertainty in the global crude market regarding geopolitical issues, refinery shutdowns and increasing global demand, as well as devaluation of the U.S. dollar, are clearly having an impact on the assessment of market fundamentals. One may view such factors as contributing an uncertainty or risk premium to the usual analysis of supply and demand data. Indeed, such factors now may fairly be viewed as part of the new fundamentals of these commodities.

Other demand and supply fundamentals in the oil markets are factors in high oil prices. For example, according to the latest projections from the Energy Information Administration, global consumption will increase 600,000 barrels per day more than non-OPEC production. As a result, a market with highly inelastic demand will need to equilibrate through a substantive rise in price. The upward pressure has been there and, according to these projections, will continue to be there. If the major oil companies truly believed that current levels are artificially high and do not properly reflect market fundamentals, one would expect them to sell in order to lock in the current high prices. Such selling of course then would have the effect of providing downward pressure on prices. However, such a response by the big oil companies has not been observed to date.

MARGINS

In futures markets, margins function as financial performance bonds and are employed to manage financial risk and to ensure financial integrity. A futures margin deposit has the economic function of ensuring the smooth and efficient functioning of futures markets and the financial integrity of transactions cleared by a futures clearinghouse. Margin levels at NYMEX are reviewed daily and are routinely adjusted in response to market volatility. NYMEX has raised margin rates for crude oil six times since the beginning of the year. In fact, the margin rate for NYMEX clearing member firms and for customers of clearing members in the WTI crude oil contract has increased 94%.

Some have suggested that the answer to higher crude oil prices is to impose substantially greater margins on energy futures markets regulated by the

CFTC. The theory is that higher margin levels will dampen speculative activity, and that less speculative liquidity will lower prices. Analysis of the NYMEX data shows that the significant margin increases in the WTI crude oil contract have not triggered a corresponding decrease in price. Thus, this approach is misguided.

As noted above, the appropriate tool for controlling speculation is position limits. In addition, adjusting margin levels significantly upward will not change the underlying market fundamentals. Furthermore, given the reality of global competition in energy derivatives, increasing crude oil margins on futures markets regulated by the CFTC inevitably will force trading volume away from regulated and transparent U.S. exchanges into the unlit corners of unregulated OTC venues and also onto less regulated and more opaque overseas markets.

RECENT LEGISLATIVE INITIATIVES

A number of legislative initiatives have been proposed that are intended to respond to a perceived problem of excessive speculation in the markets, which is blamed for the rising cost of crude oil futures. NYMEX reiterates that it is important to collect the data in order to accurately assess the activity and influence of speculative activity before adopting a legislative solution. It is also important to consider the potential impact on the hedging and price discovery functions of the markets. Price signals are the most efficient transmitters of economic information, telling us when supplies are short or in surplus, when demand is robust or wanting, or when we should take notice of longer term trends. Thus, futures markets, like NYMEX, are the messengers carrying this information from the energy industry to the public. It would be contrary to the

public interest to adopt legislation that impairs the important price discovery function of the markets.

Two legislative proposals are aimed at restricting speculative participation in commodity markets. One would establish aggregate limits on the share of a commodity futures market that may be held by financial investors. This provision would direct the CFTC to set aggregate limits on a commodity-by-commodity basis to cap the combined net long position which may be held by all persons not engaged in bona fide hedging activities. A related legislative initiative would replace position accountability levels with speculative position limits set by the CFTC, eliminate the hedge exemption for swap dealers and other financial institutions and extend speculative limits to positions held on foreign futures exchanges and over-the-counter.

Speculative position limits are already required on all physically settled NYMEX futures and are reviewed and approved by the CFTC. As noted above, these limits are strictly enforced, although exemptions are available for certain bona fide hedge positions. Position limits, however, are not required on less transparent, unregulated OTC and foreign markets. If an analysis of position data, currently being gathered by the CFTC, discloses that speculative limit requirements are being circumvented in any way, regulatory action could be taken immediately to correct this loophole.

Another legislative proposal would: 1) prohibit private and public pension funds with more than $500 million in assets from investing in agriculture and energy commodities on U.S. futures exchanges, foreign exchanges or over-the-

counter; 2) prohibit U.S. or foreign governmental entities with more than $500 million in assets from investing in agricultural and energy commodities, unless engaging in bona fide hedging activity; and 3) prohibit institutional investors with more than $500 million in assets from investing in commodity markets through a passively managed and broadly diversified index fund tied to physical commodities.

NYMEX believes that prohibiting investment opportunities of institutional market participants effectively substitutes the judgment of Congress for the judgment of trained financial investment professionals. Moreover, the case has not been made to support a finding that institutional investors are contributing to the high price of crude oil. It would be premature to adopt a legislative solution for an unproven and unsubstantiated problem. As noted above, NYMEX believes that requiring additional transparency to enhance the ability to monitor these markets is a more responsible approach and will avoid undue harm to investors and to the markets.

CONCLUSION

Complete transparency is fundamental for competitive markets. The same level of transparency and position size controls present on regulated U.S. futures markets should be the standard for foreign markets offering products with U.S. delivery points and for OTC contracts that serve a price discovery function. Additionally, a case has been made for disaggregation and delineation of positions held by swap dealers. This will provide important information to determine whether speculative position limits are being avoided by index funds

and other institutional investors and whether their activity is influencing market prices.

Many factors are contributing to high energy prices. NYMEX continues to believe that market fundamentals are a significant factor that must not be discounted in this debate. Increasing margins to dampen speculative activity or otherwise restricting the participation of institutional investors will not change the fundamentals and will inevitably drive business away from the highly regulated, transparent market. This will do more harm than good.

I thank you for the opportunity to share the viewpoint of the New York Mercantile Exchange with you today. I will be happy to answer any questions that any Members of the Committee may have.

Testimony of

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

before the

Committee on Homeland Security And Governmental Affairs
United States Senate

June 24, 2008

Mr. Chairman and Members of the Committee, thank you for the opportunity to testify today on the topic of "Ending Excessive Speculation in Commodity Markets." I testified in front of this committee on May 20th of this year on this important issue and I welcome the opportunity to return and discuss legislative options.[1] In that testimony I shared many observations and statistics related to the general phenomenon of Index Speculation in the commodities futures markets. Before we discuss legislative options, I would like to build on my previous testimony and look specifically at the damage that Index Speculation does to the price discovery function in the agricultural and energy futures markets.

When I use the term Index Speculator, I am referring to Institutional Investors such as Corporate and Government Pension Funds, Sovereign Wealth Funds, University Endowments and others who allocate capital to the 25 key commodities that compose the Standard & Poors - Goldman Sachs Commodity Index (S&P-GSCI)[2] and/or the Dow Jones - AIG Commodity Index (DJ-AIG).[3]

In the last five years, Institutional Investors have adopted the mistaken belief that commodities futures are an investable asset class, similar to capital market investments. They have failed to grasp the essential differences between the commodities futures markets and the capital markets, and do not appear to understand that investing in inventories is vastly different from investing in the means of production.[4]

Commodities futures markets exist solely for the benefit of bona fide physical hedgers, the producers and consumers of actual physical commodities.[5] These markets do not exist for the

---

[1] http://hsgac.senate.gov/public/_files/052008Masters.pdf

[2] http://www2.standardandpoors.com/portal/site/sp/en/us/page.topic/indices_gsci/2,3,4,0,0,0,0,0,0,0,1,1,0,0,0,0,0.html

[3] http://www.djindexes.com/mdsidx/index.cfm?event=showAigIntro

[4] "Put simply, a capital asset is part of a system that has some consistent, expected output that exceeds the owners' consumption needs. It is a component of the means of production. The designation is dependent on the use of the asset, not on its type. My automobile is a consumption good, inappropriate as a store of value for me. The fleet of automobiles owned by a car rental company is a capital asset, designed to produce a constant return over the useful life. Beer is a consumption good for most of us, a capital asset when stored in a brewery or a bar. Capital assets should contribute to a constant, positive return through their part in the output of a business. Money directed toward these assets by shareholders, lenders, sole proprietors and any other participants can be said to be invested. Capital assets can become speculative media rather than investment outlets when they are held in a form in which the only expected return would come from a change in price rather than the generation of an output. Speculative assets promise no output beyond a prospective change in price. . . . Central to the question is whether or not commodity indices, meant to track the price changes in a fairly broad but largely energy related list of commodities are an investment medium that might reasonably constitute an asset class in the manner of common stocks, rental properties, bonds, private businesses or any groups of capital assets from which the owners can expect some positive business output over time. The clear answer is 'no.'" excerpted from pre-publication copy of "The Commodity Question," Michael Aronstein, Marketfield Asset Management, New York, NY.

[5] "The fundamental purpose of the measure is to insure fair practice and honest dealing on the commodity exchanges and to provide a measure of control over those forms of speculative activity which too often demoralize the markets to the injury of producers and consumers and the exchanges themselves." Report No. 421, U.S. House of Representatives 74th Congress, Accompanying the Commodity Exchange Act, March 18, 1935.

purpose of speculation.[6] The commodities futures markets provide bona fide physical hedgers with two vital functions: one, a means for price discovery, and two, a means to offset price risk.[7]

Congress clearly understood and appreciated the value of these two vital functions back in 1936 when it passed the Commodity Exchange Act.[8] The Commodity Exchange Act was designed to protect these functions by establishing speculative position limits, thereby preventing what it terms "excessive speculation."[9] While the Commodity Exchange Act does not define this term, it is clear that Congress recognized that unlimited speculation posed a threat to the commodities futures markets and their two vital functions.[10]

---

[6] Some limited speculation in the commodities futures markets provides beneficial liquidity to the primary constituency (bona fide physical hedgers).

[7] "An Important Mission in the Ever-Changing World of Finance," About The CFTC, http://www.cftc.gov/aboutthecftc/index.htm

[8] United States Code Title 7, Chapter 1, Section 5(a) Findings http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+7USC5

[9] The commodities futures markets are completely free markets for bona fide physical hedgers - they face no restrictions.

[10] "It should be our national policy to restrict, as far as possible, the use of these exchanges for purely speculative operations." President Franklin D. Roosevelt message to Congress February 9, 1934
"The bill authorizes the Commission . . .to fix limitations upon purely speculative trades and commitments. Hedging transactions are expressly exempted. That this power of the Commission will be exercised judiciously and for the purposes merely of preventing overspeculation and a type of 'racketeering' by a few large professional traders, may be assumed as a matter of course." Report No. 421, U.S. House of Representatives 74th Congress, Accompanying the Commodity Exchange Act, March 18, 1935. Also see previous footnote 6.

HOW THE PRICE DISCOVERY FUNCTION WORKS IN THE AGRICULTURAL AND ENERGY MARKETS

Because commodities are bulky and costly to transport, spot markets for commodities are geographically dispersed. Many decades ago, local markets relied almost exclusively on local supply and demand to determine prices, with the result being that there were sometimes great differences between prices in various regional spot markets.

This began to change in the 1980s, when spot market participants in the agricultural and energy markets moved to embrace centralized futures markets as the best indicator of overall supply and demand conditions across all spot markets.[11] Because of the benefits of price discovery and risk hedging that the futures markets provide to physical commodity producers and consumers, today those participants have agreed to price nearly all spot market transactions at the futures price plus or minus a "local basis" or "differential."[12]

The CFTC describes it this way: "In many physical commodities (especially agricultural commodities), cash market participants base spot and forward prices on the futures prices that are "discovered" in the competitive, open auction market of a futures exchange."[13] Platts, which is the leading pricing service for the energy industry, describes it this way: "In the spot market, therefore, negotiations for physical oils will typically use NYMEX as a reference point, with bids/offers and deals expressed as a differential to the futures price. Using these differentials, Platts makes daily and in some cases intra-day assessments of the price for various physical grades of crude oil, which may be referenced in other spot, term or derivatives deals."[14]

---

[11] "The Structure of Global Oil Markets—A Backgrounder," Platts, A Division of McGraw Hill Companies, July 2007, page 5. http://www.platts.com/Resources/whitepapers/index.xml. Additionally Conversation with Tom Buis, President of National Farmers Union, June 10, 2008

[12] Not all spot commodities are priced this way. This method is used mostly in agriculture for wheat, corn and soybeans, and in energy for WTI crude oil, heating oil, gasoline and natural gas. The basis (in agricultural markets), or differential (in energy markets), is an adjustment to the futures price based on local supply and demand conditions.

[13] "The Economic Purpose of Futures Markets and How They Work - Price Discovery or Price Basing," Commodities Futures Trading Commission Website, http://www.cftc.gov/educationcenter/economicpurpose.html

[14] "Platts Oil Pricing and Market-on-Close Methodology Explained - A Backgrounder," Platts, A Division of McGraw Hill Companies, July 2007, page 3. http://www.platts.com/Resources/whitepapers/index.xml

As an example, a wheat farmer delivering his crops to the local grain elevator is going to be paid the CBOT futures price plus or minus the local basis spread. A New England Heating Oil distributor buying heating oil from the local wholesaler is going to be paying the NYMEX futures price plus or minus a local differential. That means that when the futures price rises by $1, if the local basis/differential does not change, then the spot price will also rise by $1, typically the same day.[15]

In the present system, price changes for key agricultural and energy commodities originate in the futures markets and then are transmitted directly to the spot markets. For these commodities, what happens in the futures markets does not stay in the futures markets, but is felt almost immediately in the spot markets.

Physical commodity producers and consumers trust and rely upon the price discovery function of the commodities futures markets to accurately reflect the overall level of supply and demand, pricing their spot market transactions directly off the applicable futures price.[16] For many years, spot market traders have trusted the veracity of futures prices, focusing instead almost exclusively on the local basis / differential in their respective markets.[17]

Unfortunately, this has changed in the last few years. This trust has been betrayed, and many physical commodity market participants are now losing faith in the futures price as a benchmark for their transactions.[18]

---

[15] Any classic finance textbook would tell you that futures prices are a derivative of spot prices but we can see here that in fact the opposite is true. Capital markets participants are taught that (1) spot prices are exclusively a function of supply and demand in the spot market (2) futures prices are equal to spot prices plus the cost of carry minus the convenience yield (3) futures prices can only impact spot prices if they impact the supply or demand for that commodity in the spot markets and (4) futures prices must converge to spot prices at expiration. The only one of these statements that is true for these particular commodities futures is that futures and spot prices must converge. But that is only half true, because spot prices can rise to meet futures prices; futures prices do not always have to fall. This whole issue highlights imputed biases that capital markets investors have when it comes to the commodities futures markets.

[16] Other non-exchange traded commodities also price off futures contracts that they closely resemble or with which they have an economic relationship. "Many non-traded commodities price according to the nearest exchange-traded benchmarks - for example, coal to oil, fertilisers to corn and soya - and therefore tend to move in the same direction." GaveKal Research Report, May 27, 2008. This comment was issued in response to people claiming that Index Speculators cannot be driving futures prices because non-exchange traded commodities have risen in price. http://ftalphaville.ft.com/blog/2008/05/27/13338/commodities-spiral-are-speculators-to-blame/ also see http://gavekal.com/forum3/default.aspx?f=2&m=2848

[17] I have had numerous conversations with spot market traders of physical crude and crude products as well as participants in the grains markets. I would encourage Congress to reach out to participants in these spot markets in order to understand how the pricing mechanisms work. I can supply an extensive list of contacts to assist in this effort if needed.

[18] One needs to look no further for a sampling of physical commodity producers and consumers questioning the price discovery process than the Agricultural Forum that the CFTC hosted on April 22, 2008 - http://www.cftc.gov/newsroom/cftcevents/2008/ocaevent042208.html

INDEX SPECULATORS HAVE DRIVEN FUTURES AND SPOT PRICES HIGHER

It is important to remember there is only one thing that causes prices to rise in futures markets: buy orders. When a trader sends a buy order to the exchange floor or presses the "buy" key on their trading terminal, if he or she is attempting to buy more contracts than are currently offered for sale at the market price, then the market price will rise.[19] As a hypothetical example, if there are 50 WTI Crude Oil contracts offered for sale at $135.10 and another 50 WTI Crude Oil contracts offered for sale at $135.15 then a buy order of 100 contracts will result in the price moving up from $135.10 to $135.15.

Please note that ***who*** initiates a buy order and ***why*** they initiate it are irrelevant when it comes to explaining an order's impact on market prices. Almost all trading is anonymous and a trader's underlying motivation is generally not known to his fellow traders. A 100 contract buy order from a bona fide physical hedger locking in input costs will have the exact same price impact as a 100 contract buy order from an Institutional Investor trying to allocate into commodity futures. 100 contracts is 100 contracts and demand is demand, regardless of who is initiating the buy orders and why they are initiating them.[20]

Table One shows that Index Speculators have bought more commodities futures contracts in the last five years than any other group of market participants.[21] If Index Speculators have been the largest buyer of futures contracts, is it not reasonable to assume that they have had the largest impact on futures prices?

---

[19] Some commentators have observed that for every buyer there is a seller, implying somehow that prices will not move because one cancels out the other. If that were the case, then prices would never move. As it stands, every transaction ever recorded in history necessarily included both a buyer and a seller. In January of 2000 the price of Yahoo common stock traded above $120 per share. In October of 2001 the price of Yahoo common stock traded below $10 per share. In every one of these transactions there was a buyer and a seller.

[20] Comments by regulators that speculators do not move prices, are price-takers not price-makers, et cetera, are patently absurd. If speculators cannot move prices, why do we have any speculative position limits? Why do we have a regulator? It begs the question why a regulator would be determined to convince the public that the group they are supposed to regulate poses no threat to the marketplace.

[21] The figures in Tables One, Two and Three do NOT include single commodity swaps that speculators use to access the futures markets through the "swaps" loophole. We have seen unofficial figures that lead us to believe that a large fraction of commercial open interest in the NYMEX WTI crude oil contract actually represents speculative swap positions. Although NYMEX has these exact numbers, they have presently not released them to the public.

TABLE ONE[24]	2003 LONG OPEN INTEREST			2008 LONG OPEN INTEREST			PURCHASES LAST 5 YEARS		
	PHYSICAL HEDGER	TRADITIONAL SPECULATOR	INDEX SPECULATOR	PHYSICAL HEDGER	TRADITIONAL SPECULATOR	INDEX SPECULATOR	PHYSICAL HEDGER	TRADITIONAL SPECULATOR	INDEX SPECULATOR
COCOA	71,300	5,673	2,710	50,243	72,866	29,527	-21,056	67,193	26,817
COFFEE	38,378	12,197	5,671	41,159	56,866	63,133	2,781	44,669	57,463
CORN	227,612	54,123	51,139	505,627	300,017	441,197	278,016	245,894	390,057
COTTON	52,529	23,633	9,518	91,820	77,132	114,804	39,291	53,499	105,286
SOYBEAN OIL	76,717	33,449	3,272	104,064	48,619	72,287	27,348	15,169	69,015
SOYBEANS	98,696	58,567	13,733	141,375	132,849	194,391	42,679	74,282	180,658
SUGAR	95,610	31,143	45,931	359,427	180,670	411,510	263,817	149,527	365,579
WHEAT	24,846	25,698	33,960	58,484	66,958	218,191	33,639	41,260	184,231
WHEAT KC	32,759	4,955	10,526	35,629	31,201	30,299	2,870	26,246	19,773
FEEDER CATTLE	3,864	5,238	2,641	5,117	16,208	9,279	1,253	10,969	6,637
LEAN HOGS	5,316	7,377	15,517	29,366	33,374	105,228	24,049	25,997	89,711
LIVE CATTLE	19,820	40,864	20,021	27,898	51,798	135,451	8,078	10,934	115,429
WTI CRUDE OIL	433,028	56,629	108,599	1,161,063	203,280	606,176	728,035	146,651	497,577
HEATING OIL	69,363	14,063	26,217	65,851	27,972	83,008	-3,512	13,909	56,791
GASOLINE	44,252	20,698	25,555	83,826	41,534	78,692	39,574	20,836	53,137
NATURAL GAS	397,488	21,734	29,774	480,964	77,462	214,641	83,476	55,728	184,867
TOTAL	1,691,579	416,042	404,785	3,241,915	1,418,805	2,807,813	1,550,337	1,002,764	2,403,029

Figures derived from data from Goldman Sachs, Dow Jones, Bloomberg, CFTC Commitments of Traders report and the CFTC CIT Supplement. Non-Directional Spreads and Non-Report (Unclassified) Positions are not shown. Traditional Speculators accessing the futures market through the "swaps loophole" are still classified as Physical Hedgers because the CFTC does not distinguish.

Below is a small sample of what Wall Street analysts have had to say about Institutional Investors driving up commodities futures prices:

> "A Tidal Wave of Fund Flow - Despite the economic gloom many commodity prices hit new highs in recent weeks, driven largely by investment inflows."[22]
>
> *Citigroup - April 7, 2008*

> "Without question increased fund flow into commodities has boosted prices."[23]
>
> *Goldman Sachs[24] - May 5, 2008*

> "We have argued recently that some of the price buoyancy during Q1 reflected financial flows and investments in oil and other commodities. . . . Our study indicated that for every $100 million in new inflows, WTI prices increase by 1.6%. . . . Our conclusion for this study is that we are seeing the classic ingredients of an asset bubble."[25]
>
> *Lehman Brothers - May 29, 2008*

> "The entry of new financial or speculative investors into global commodities markets is fueling the dramatic run-up in prices"[26]
>
> *Greenwich Associates - May 2008*

It is clear to Wall Street from their vantage point that Institutional Investors pouring billions of dollars into the commodities futures markets have greatly influenced prices. The reality is that the effect of Index Speculators has been so great that they have actually altered the price discovery dynamics in today's futures markets.

---

[22] "Great Bulks of Fire IV," Citi Commodities Strategy, Alan Heap and Alex Tonks, April 7, 2008, page 1.

[23] $100 oil reality, part 2: Has the super-spike end game begun?," Goldman Sachs Global Investment Research, Arjun N. Murthi, Brian Singer, et al. May 5, 2008. page 12.

[24] Goldman Sachs, together with Morgan Stanley, are the two largest purveyors of commodity index swaps followed by J.P. Morgan and Barclays. Source: "The Global Commodities Boom," Greenwich Associates, Andrew Awad, Woody Canaday, et al., May 2008, page 1.

[25] "Oil Dot-com," Lehman Brothers Energy Special Report, Edward Morse, Michael Waldron, et. al., May 29, 2008, page 3.

[26] "Financial Investors Fueling Commodities Boom," Greenwich Associates, Andrew Awad, Woody Canaday, et al., May 2008, page 1.

INDEX SPECULATORS DAMAGE THE PRICE DISCOVERY FUNCTION OF THE COMMODITIES FUTURES MARKETS

Bona fide physical hedgers are motivated by one thing - risk reduction. Physical commodity producers only trade in order to hedge their actual physical production. Physical commodity consumers only trade in order to hedge their actual physical consumption. For this reason, their trades are always based on the actual supply and demand fundamentals that directly affect them in the underlying physical markets. Their trading decisions strengthen the price discovery function of the commodities futures markets.

In contrast, Index Speculators invest in a broad basket of commodities and therefore do not express a view on any single commodity. Their reasons for entering into their positions vary widely. Perhaps their investment committee recently voted to allocate millions of dollars to commodities. Or if they manage a commodity index mutual fund or ETF they might have received cash inflows from investors. Perhaps they are seeking to hedge against inflation or to make a bet against the U.S. dollar.[27] What is clear is that the vast majority of Index Speculators do not trade based on the underlying supply and demand fundamentals of the individual physical commodities. Therefore, their trading decisions damage the price discovery function of the commodities futures markets.

If a pension fund decides to allocate $100 million to a commodities futures strategy that replicates the S&P GSCI, the $40 million that consequently flows into WTI Crude Oil has nothing to do with the actual supply or demand for crude oil in the real world. Every single WTI futures contract that is traded for any reason other than the supply and demand of physical crude oil is a contract that weakens the price discovery function of the markets.

In crude oil, Index Speculator demand for paper barrels[28] has little or nothing to do with the demand for physical barrels. Yet under the current pricing system, the paper barrel price sets the real world price for physical barrels.

---

[27] Some Wall Street commentators would argue that the level of the U.S. Dollar vis a vis other currencies is a fundamental factor in supply and demand. However, any effect the dollar has on supply and demand will show up in actual supply and demand figures and will be reflected in the hedging activities of physical commodity producers and consumers. Investors' myopic preoccupation with commodity prices relative to currency levels stems from their macroeconomic views rather than from any firsthand experience observing actual changes in real world supply and demand due to these factors.

[28] It is critical to note that Index Speculators never actually take possession of physical commodities, and they do not have to in order to drive up prices. They impact the price at the time that they buy their initial futures contracts. Then when their contracts approach the delivery month, they simply exchange their existing contracts for other contracts with expiration dates that are further in the future. Because futures are a zero sum game, there is someone on the other side of the Index Speculators position that generally is just as motivated to close out their position. Since well over 90% of all positions get closed out, the futures exchanges are set up to facilitate what is called "rolling," which involves a specific kind of trade called a "spread trade." As part of their roll trade, Index Speculators close out one futures contract which simply "extinguishes" it; they then open another new contract with a later delivery month. Because they always defer delivery, Index Speculators never take possession of physical inventories.

Contrary to what some on Wall Street would have you believe, it is physical commodity producers and consumers who make commodities futures markets "efficient."[29] The commodities futures demand of Index Speculators for "investment" reasons has little or nothing to do with the supply and demand of the actual commodities and grossly distorts the price discovery function. Institutional Investor participation actually makes the commodities futures markets less "efficient" from a pricing standpoint.

By virtue of their investment strategy, Index Speculators collectively do great damage to the price discovery function of the commodities futures markets.

[29] The Efficient Markets Hypothesis (EMH) is a capital markets theory that underlies the key rationale for passive indexing. It says that all publicly available information concerning a company's future cash flows is already reflected in a company's stock price so one cannot consistently make money by analyzing publicly available information. It incorporates the Capital Asset Pricing Model (CAPM) which says that all securities can be valued as the net present value of future cash flows. A big part of CAPM is determining the appropriate discount rate utilizing the Beta of the security with the market. EMH and CAPM both tie into Modern Portfolio Theory that talks about the ideal composition of portfolios. Given that commodities have no future cash flows and a beta of 1 with themselves (oil is part of the oil market) it looks rather foolish to try to apply capital markets concepts to the commodities futures markets.

INDEX SPECULATORS' PRESENCE BREEDS EXCESSIVE SPECULATION AND RADICALLY RESHAPES MARKET DYNAMICS

Traditional Speculators[30], unlike Index Speculators, are not committed to any particular trading strategy. Their motivation is simply to profit from the direction of prices, whether that is up or down.

Table Two shows that in 1998, average long positions in the commodities futures markets were comprised of about 79% bona fide physical hedgers, 14% Traditional Speculators and 7% Index Speculators. Because speculators at the time were outnumbered 4 to 1 by physical hedgers, the speculators knew that futures prices would move based on what physical hedgers did. Because physical hedgers based their trading decisions strictly on supply and demand fundamentals, Traditional Speculators did the same. For this reason, commodities futures markets effectively reflected the supply and demand realities in the underlying physical commodity market and were very efficient at price discovery.[31]

TABLE TWO
Commodities Futures Markets
Percentage Of Open Interest[24]

1998	LONG / DEMAND SIDE		
	Physical Hedger	Traditional Speculator	Index Speculator
COCOA	89%	9%	2%
COFFEE	81%	18%	2%
CORN	87%	9%	4%
COTTON	84%	14%	2%
SOYBEAN OIL	73%	27%	0%
SOYBEANS	87%	11%	2%
SUGAR	87%	9%	3%
WHEAT	68%	21%	11%
WHEAT KC	86%	5%	8%
FEED CATTLE	52%	37%	10%
LEAN HOGS	57%	28%	16%
LIVE CATTLE	68%	24%	9%
WTI CRUDE OIL	84%	4%	12%
HEATING OIL	88%	2%	10%
GASOLINE	80%	4%	16%
NATURAL GAS	90%	3%	7%
AVERAGE	79%	14%	7%

Source: CFTC Commitments of Traders reports, and estimates derived from CFTC CIT Supplement.

TABLE THREE
Commodities Futures Markets
Percentage Of Open Interest[24]

2008	LONG / DEMAND SIDE		
	Physical Hedger	Traditional Speculator	Index Speculator
COCOA	33%	48%	19%
COFFEE	26%	35%	39%
CORN	41%	24%	35%
COTTON	32%	27%	41%
SOYBEAN OIL	46%	22%	32%
SOYBEANS	30%	28%	42%
SUGAR	38%	19%	43%
WHEAT	17%	20%	64%
WHEAT KC	37%	32%	31%
FEED CATTLE	17%	53%	30%
LEAN HOGS	18%	20%	63%
LIVE CATTLE	13%	24%	63%
WTI CRUDE OIL	59%	10%	31%
HEATING OIL	37%	16%	47%
GASOLINE	41%	20%	39%
NATURAL GAS	62%	10%	28%
AVERAGE	34%	26%	40%

Source: CFTC Commitments of Traders reports, and estimates derived from CFTC CIT Supplement

---

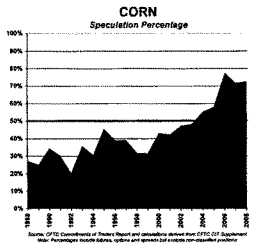
[30] A Traditional Speculator follows an active trading strategy of buying and selling. They have always been present in the commodities futures markets and do not have the detrimental characteristics of Index Speculators that I outlined in my May 20th Testimony http://hsgac.senate.gov/public/_files/052008Masters.pdf

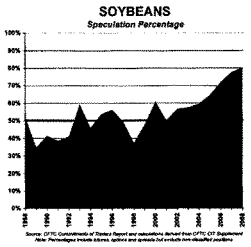
[31] At this time, liquidity in the futures markets was more than sufficient;market participants were not complaining about a lack of liquidity. The people who most want to increase speculative volume in the name of increased liquidity are the same people who get paid on a per contract basis, namely the exchanges.

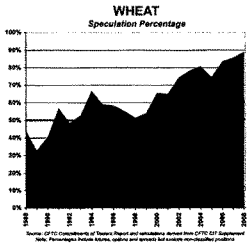
Ten years later, the markets look dramatically different. Today, on the long side of the market, the dominant position of bona fide physical hedgers has been usurped by Index Speculators. Table Three shows that Index Speculators now average 40% of the long open interest, followed by bona fide physical hedgers at 34% and Traditional Speculators at 26%. This means that speculators today outnumber bona fide physical hedgers by a 2 to 1 ratio!

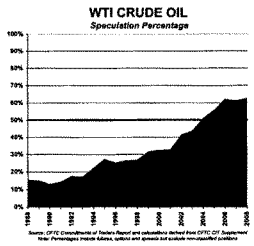
Index Speculators have been consistently buying billions of dollars worth of futures contracts at an increasing rate over the last 5 years. This accelerating buying pressure has contributed to an upward price trend for commodities futures. The strong price performance of commodities has, in turn, attracted an increasing number of additional speculators, including active participants like Hedge Funds. The influx of these additional speculators into the commodities futures markets further amplifies price increases. The resulting speculative feedback loop contributes to increased volatility and accelerating price moves.

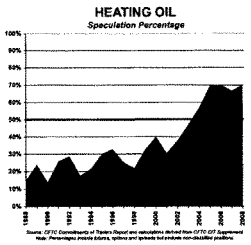
The charts below show this phenomenal increase in speculation in recent years as more and more speculators have entered the commodities futures markets.

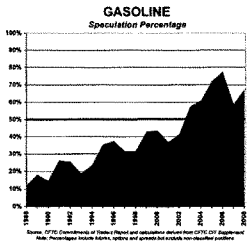












Traditional Speculators that were active in the markets prior to the rise of the Index Speculators have had to adapt their trading strategies to this new dynamic. Those Traditional Speculators that continued to trade purely on supply and demand fundamentals have not survived. Those Traditional Speculators that did adapt and thrive under this new dynamic have adopted trading strategies that take into account the behavior of these new entrants into the commodities futures markets.

Because the commodities futures markets are now dominated by speculators, of which the Index Speculator is the most influential type, prices in these markets move for reasons that increasingly have little to do with specific commodity supply and demand fundamentals. Today the level of the U.S. dollar, the allocation decisions of Pension Funds or the amount of investor inflows into commodity index ETFs, ETNs and mutual funds can have a much bigger impact on commodity futures prices than the fundamental conditions in the underlying physical markets. All of the discussion today about WTI crude oil being a hedge against a weakening U.S. dollar is prima facie evidence that capital markets investors now dominate the WTI crude oil markets. Bona fide physical hedgers as a group have increasingly lost their ability to influence prices through their hedging decisions.

Because of this disassociation between futures prices and the supply and demand realities in the physical markets, the futures markets are no longer able to serve the only constituency they were ever intended to serve: bona fide physical hedgers. Many bona fide physical hedgers, now greatly outnumbered and having to transact in a market that is mainly driven by the activities of large institutional speculators, are questioning the value of the futures markets for hedging purposes. If this trend continues, we can expect to see many physical commodity producers and consumers abandon the futures markets entirely as a vehicle for hedging purposes and price discovery. At that point, the futures markets' destruction from excessive speculation will be complete.

RESTORING THE PRICE DISCOVERY FUNCTION OF THE COMMODITIES FUTURES MARKETS

The commodities futures markets today are clearly experiencing the detrimental effects of excessive speculation. The time for studies is well past. Studies should be attempted prior to the adoption of new financial techniques, like the FDA does with new medicines, not after approval has been granted. "First do no harm…", as the beginning of the Hippocratic Oath reads, is a concept that market regulators should take to heart.

I have read the discussion drafts introduced by Senators Lieberman and Collins on June 18th and believe they represent a substantial step in the right direction. I note that your three proposed pieces of legislation correspond generally to the first three steps of the four steps that I am outlining here today. To the extent that they differ please accept these differences as my suggestions on how to improve upon the proposals. Now, let me outline for you the steps I believe are needed to protect and strengthen the critical price discovery function of our commodities futures markets.

STEP ONE: ESTABLISH LIMITS THAT APPLY TO EVERY MARKET PARTICIPANT

As a first step, I recommend that Congress convene a panel composed exclusively of physical commodity producers and consumers for every commodity. This panel will set reasonable speculative position limits in the spot month as well as in all other individual months, and as an aggregate across all months. For commodities where real limits have been replaced by "accountability" limits, real limits must be re-established. [32]

The commodities futures markets exist solely for the benefit of bona fide physical hedgers, so they are best qualified to set the limits. These physical market participants understand the benefits of liquidity and will do nothing to jeopardize their ability to hedge. The key here is that reasonable speculative limits allow the commodities futures markets to function properly.

As part of this first step, speculative position limits must apply to every market participant (exempting bona fide physical hedgers) whether they access the futures markets directly or trade in the over-the-counter markets through swaps and other derivatives. This means effectively closing the swaps loophole and ensuring that position limits "look through" the swap transaction to the ultimate counterparty. It is essential that swaps dealers report all their positions to the CFTC so that positions can be aggregated at the control entity level for purposes of applying position limits.

---

[32] In 1998, the CFTC codified an exemption for commodities that trade in "high volume and liquid markets" that allowed exchanges to replace speculative position limits with "position accountability limits" which do not actually limit the size of positions. Speculative position limits were still required in the spot month. So effectively this means there are no hard and fast limits for NYMEX WTI crude oil futures except in the spot month. http://www.cftc.gov/foia/fedreg98/foi980717a.htm

One potential avenue for ensuring that speculative limits apply in the over the counter markets would be to require that all OTC transactions clear through the appropriate futures exchange. This would have the added benefit of strengthening the current system and making it more transparent.

Additionally, it is imperative that measures be taken to ensure that speculative position limits apply to the proprietary trading desks of Wall Street Banks. Also, if a financial institution owns a physical commodity business, then they can only take exempt positions commensurate with the size of their actual physical business. Beyond that, they must be subject to the speculative position limits.

STEP TWO: PLACE AN OVERALL LIMIT ON EXCESSIVE SPECULATION FOR EACH COMMODITY

As a second step, Congress should instruct the panel of physical commodity producers and consumers to determine, based on a percentage of open interest, what constitutes "excessive speculation." As an example, physical crude oil producers and consumers may decide that the crude oil futures markets should never be more than 35% speculative (not including spreads) on a percentage of open interest basis. These are their markets, so they should be empowered to define numerically what constitutes excessive speculation.

Next, the CFTC should be instructed to establish "circuit breakers" (a concept familiar to equity market participants) that adjust individual speculative position limits downward in order to prevent any commodity futures markets from reaching the overall limit established by the panel. These adjustments to individual limits should happen in a gradual fashion and be based on data that is averaged over time in order to minimize the impact on the markets. A speculator whose existing position exceeds the newly established limit by virtue of the downward adjustment in limits would not be required to sell; they would simply be unable to add to their position.

Building on our earlier crude oil example, the CFTC could publish a sliding scale from 25% to 35% of speculative open interest that pares back the individual position limits from 100% to 20% of their normal size. So if the established aggregate speculative position limit was normally 20,000 contracts at an overall speculative percentage of 25% or less, then if overall speculation reaches 30% perhaps the individual position limit would adjust downward to 12,000 contracts.[33]

[33] If position limits range between 20,000 contracts (100%) and 4,000 contracts (20%) based on an overall speculative percentage of 25% to 35% then at 30%, the midpoint of the range, speculative position limits would equal 12,000 contracts which is halfway between 20,000 and 4,000. These figures are used purely for illustrative purposes and do not reflect levels that we recommend.

STEP THREE: PROHIBIT COMMODITY INDEX REPLICATION STRATEGIES

The third step is to eliminate the practice of investing through passive commodity index replication. Index Speculators have no sensitivity to supply and demand in the individual commodities because of the nature of passive indexing. The practice should be prohibited because of the damage that it does to the price discovery function. Congress should use any and all available means to do so. One potential avenue might be ERISA.[34]

Another avenue might be found in the Commodities Exchange Act which states, when discussing speculative position limits, that "such limits upon positions and trading shall apply to positions held by, and trading done by, two or more persons acting pursuant to an expressed or implied agreement or understanding, the same as if the positions were held by, or the trading were done by, a single person."[35] Since, Index Speculators are all acting in express agreement by following the exact same index trading methodology, they should all be collectively subject to the speculative position limits of a single speculator. If this provision of the CEA were enforced, then the amount of money allocated to index replication would have to drop from the current level of $260 billion to the limits of a single speculator, approximately $4 billion.

STEP FOUR: INVESTIGATE PHYSICAL HOARDING OF COMMODITIES BY INVESTORS

Congress should actively investigate the practice of investors buying physical commodity inventories. It has come to my attention that some Wall Street Banks are offering commodity swaps based on actual physical commodities.[36] This is a distressing development because it means that investors are directly competing with American corporations for natural resources and thereby competing with American consumers.

---

[34] Pension fund trustees under the Prudent Man Rule have a fiduciary duty to avoid purely speculative "investments" (such as futures contracts). Under the Prudent Investor Rule, no class of "investments" is excluded if it makes sense from a portfolio perspective, but speculating is still not sanctioned by the rule.

[35] U.S. Code, Title 7, Chapter 1, Section 6a, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+7USC6a

[36] "CS Commodities: Group Update And Key Commodity Themes For 2008," Credit Suisse International, Alex Toone (Head of Sales) see also "Trade Idea: Fixed Rate Swap On Iron Ore," Credit Suisse International, May 23, 2008

DO NOT BE SWAYED BY EMPTY THREATS OF OFFSHORE MIGRATION

Before I conclude, let me say that many of the people who are profiting from the practices outlined in my testimony will try to scare you into believing that futures trading in U.S. commodities will simply move offshore. This is an empty threat.

First of all, any futures contract that calls for physical delivery inside the United States is automatically subject to CFTC regulation.[37] Any futures contract that cash settles against a U.S. contract with physical delivery provisions is also automatically subject to CFTC regulation unless specifically exempted.[38] If not exempted, then no person inside the United States may lawfully trade that contract.[39] So for instance, 60% of the volume of the cash-settled WTI crude oil contract on the Intercontinental Exchange (ICE) is traded by U.S. entities.[40] If the CFTC had not exempted the ICE from regulation then those U.S. entities would not be able to trade that contract and it would have been very difficult for the contract to get off the ground.

In order for any futures contract to be successful it must reach a "critical mass" of volume.[41] Market participants always prefer the contract that has the most liquidity. The United States is the largest consumer of energy in the world and the largest producer of food in the world. Every U.S.-based physical commodity producer and consumer will favor a futures contract with physical delivery provisions inside the United States. This will be the contract that they choose as their benchmark for spot market transactions, which will only encourage non-U.S. physical market participants to choose this contract as well. This ensures the critical mass of liquidity necessary for the futures contract to flourish.

Re-establishing speculative position limits will significantly reduce the speculative volume on commodities futures exchanges. But, the majority of speculators likely will remain well within the speculative position limits and will not be affected. Therefore they will have no incentive to shift their trading to non-regulated exchanges.

Proper enforcement of speculative position limits and the elimination of any hedge exemptions for arbitrage transactions between U.S. regulated and non-U.S. regulated exchanges will mean that prices on offshore exchanges are de-linked from prices on U.S. exchanges. If an offshore exchange (1) cannot offer a physical delivery provision within the U.S., (2) cannot attract

---

[37] Section 4.05[2] "Derivatives Regulation," Philip McBride Johnson and Thomas Lee Hazen, Aspen Press, 2004, pages 977-980

[38] Section 4.05[6] "Derivatives Regulation," Philip McBride Johnson and Thomas Lee Hazen, Aspen Press, 2004, pages 983-986. See also Testimony of Michael Greenberger - June 3, 2008: http://commerce.senate.gov/public/_files/IMGJune3Testimony0.pdf

[39] ibid

[40] Conversations with House Energy Committee Staff

[41] "Financial Futures and Options," Todd E. Petzel, Quorom Books, New York, 1989, page 4.

physical commodity producers and consumers and (3) its prices cannot be arbitraged, then the prices of these offshore futures contracts will bear no relationship to the true prices found on U.S. regulated exchanges.

The implementation of the solutions outlined in this testimony will greatly increase the confidence of market participants around the world that our futures contracts' prices are an accurate reflection of true supply and demand fundamentals. This will lead to greater participation and therefore further volume.

FINAL THOUGHTS

Institutional Investors from the capital markets have hijacked the commodities futures markets. "Passive indexing," "long only," "buy and hold," and "long term," are all capital market investment concepts that are completely at odds with the commodities futures market. These investors have been beguiled into believing that commodities futures are an asset class just like stocks or bonds. Commodities futures markets are not capital markets.

Wall Street is very good at inventing and promoting novel investment strategies because of the lucrative rewards which can follow. Unfortunately, Wall Street is not good at foreseeing the long-term consequences of the instruments that they create. We have to look no further than the recent subprime debacle, which has now grown into a worldwide financial crisis, to see where unbridled financial innovation can lead.

Can we trust that large institutions investing in an "asset class" for the first time fully understand all of the potential ramifications of their actions? What is the cost to society when an investment decision, embraced en masse by Institutional Investors, drives futures prices and spot prices higher and ultimately cripples the price discovery function of the commodities futures markets?

What is the point of an investment practice that drives up food and energy prices and therefore contributes to higher measures of inflation?

This concludes my testimony.

Testimony of William F. Quinn,
Chairman

on behalf of
The Committee on the Investment of
Employee Benefit Assets

Before a Hearing of the Senate Homeland Security and
Governmental Affairs Committee

Washington, DC
June 24, 2008

Mr. Chairman, Ranking Member Collins, and other members of the Committee, my name is William Quinn. I am the Chairman of CIEBA.

Thank you for providing this opportunity to testify. The Committee on Investment of Employee Benefit Assets -- CIEBA -- is the voice of the Association for Financial Professionals on employee benefit plan asset management and investment issues. CIEBA was formed in 1985 to provide a nationally recognized forum and voice for ERISA-governed corporate pension plan sponsors on fiduciary and investment issues. CIEBA members are the chief investment officers of most of the major private sector retirement plans in the United States. CIEBA represents 110 of the country's largest pension funds and its members manage more than $1.5 trillion of defined benefit and defined contribution plan assets, on behalf of 17 million plan participants and beneficiaries nationwide. According to Federal Reserve data, the $966 billion managed by CIEBA members in defined benefit plans represents half of all private defined benefit plan assets.

The pension system has served millions of Americans for over half a century and tens of millions of retirees rely on defined benefit and defined contribution pension plans as a critical element of their retirement security. We owe it to working Americans and their families to ensure that any contemplated policy changes, no matter how well intentioned, do not undermine their retirement.

The record prices for food and energy in the U.S. and abroad are of great concern to all of us. We are sensitive to the urgency with which this issue must be addressed and we applaud the need to investigate this critical problem. Nonetheless, we are deeply concerned about the prospect of any legislation that would bar pension plans from investing in certain types of assets.

Congress has long recognized that direct government regulation of pension plan investments is ill-conceived. ERISA – the primary law that regulates the investment of pension assets – takes a very different tack. Rather than requiring or prohibiting specific investments, ERISA imposes rigorous fiduciary responsibilities on the persons that manage pension plan assets. These rules require a plan's fiduciary to act prudently, and to diversify plan investments so as to minimize the risk of large losses. In addition,

ERISA requires that a fiduciary act solely in the interest of the plan's participants and beneficiaries and for the exclusive purpose of providing benefits to the plan's participants. Fiduciaries who violate these obligations face a range of civil and criminal penalties.

The sole instance in which ERISA directly regulates pension investments is with respect to investments in employer securities – an area where there are clearly unique considerations, including potential conflicts of interest and the possibility of excessive concentrations of investment risk. In fact, private pension plans today invest in a wide range of different asset classes, including U.S. and international equities, U.S. and international fixed income, emerging markets, real estate, private equity, and natural resources. Plan fiduciaries use a variety of investment techniques and tools, including derivative instruments, to mitigate risk and enhance returns. Further, when presented with emerging asset classes and investment strategies, the Department of Labor – the federal agency with oversight responsibility for pension investments – has consistently given its blessing as long as the investment is prudent and for the exclusive benefit of participants and beneficiaries.[1]

Other countries have taken different approaches to the investment of pension plan assets. Historically, some U.S. state government and some European defined benefit plans had rigid investment guidelines, prohibiting certain types of investments and requiring others. Many of these rigid investment rules were eventually discarded because of the negative impact such guidelines had on investment returns and thus on employees' retirement security. Even today, European pension funds subject to more restrictions on plan investments have been shown to be consistently outperformed by funds subject to regimes such as ours, which pair investment flexibility with strict fiduciary obligations. Put simply, mechanical approaches do not work as well as the American approach. It is critical that pension plans have the ability to invest in accordance with modern portfolio theory and pursue the best investment strategy available. The investment marketplace is constantly changing and pension plans need to be able to adapt and evolve accordingly without having to comply with lists of permitted and impermissible investments.

Our concern is both with specific restrictions on pension plan investments in commodities and with the precedent that action will set for allowing the government to intrude on pension investment decisions. Today, commodities investments are not a significant part of most pension plan investments. Preliminary results for CIEBA's 2007 profile survey show that plans have less than one percent of assets invested directly in commodities and a similar amount invested in natural resources. It may be that the actual percentage of assets invested in commodities is modestly greater through indirect investment vehicles, such as hedge funds. However, in total, CIEBA members reported that only 3.15 percent of their assets were invested in the broad category of hedge funds in 2006. We firmly believe that commodities may be part of a prudent, well-diversified investment portfolio by providing a hedge against inflation and minimizing volatility, but

---

[1] *See, e.g.*, Department of Labor Information Letter to Eugene Ludwig, Comptroller of the Currency (Mar. 21, 1997) (permissibility of investing pension assets in derivatives).

our primary concern is with the principle that the government should not micromanage pension plan investments.

Pension plans are long-term investors, not speculators. The most successful plans do not 'chase' returns. Rather they have disciplined strategies for minimizing risk and enhancing returns so that plan sponsors can fulfill the promises they make to their employees.

Political temptation to intervene in pension investments is not unprecedented. Congress in the past has considered legislation that would bar plans from investing in particular investments or, conversely, would require plans to invest in particular investments. There are numerous instances in which there has been a first instinct to require pension plans to make investment decisions with a view to promoting social or political goals, such as protecting the environment or stimulating business activity in certain geographic areas.

Congress, however, has consistently rejected legislation that would subjugate the retirement security of millions of Americans and their families to other social or political concerns, no matter how worthy. In fact, when confronted with whether pension plans may take into account social goals in considering economically targeted investments, the Department of Labor interpreted "the requirements that a fiduciary act solely in the interest of, and for the exclusive purpose of providing benefits to, participants and beneficiaries as prohibiting a fiduciary from subordinating the interests of participants and beneficiaries in their retirement income to unrelated objectives."[2]

Moreover, the case for limiting pension investments in commodities has simply not been made. As others, including the Commodity Futures Trading Commission ("CFTC"), have testified, it is far from clear that institutional investors in the commodities market are driving the surging prices. The allegations that institutional investors engage in harmful speculation in the commodities markets have been almost entirely anecdotal and we are not aware of any substantial analysis that supports the allegations. Before acting, it is imperative that Congress step carefully and allow the CFTC to analyze the commodities markets and gather data to facilitate an informed approach.

Various proposals to restrict investments in commodities do not define commodity investing with any specificity. If interpreted broadly, these restrictions could apply to direct investment in commodities, any commodities futures transactions, commodity indexes and even publicly-traded companies who produce or distribute energy or agricultural commodities. Compliance with such a prohibition would significantly disrupt pension plans' overall investments, thereby hurting plan participants.

Finally, regardless of one's view of whether institutional investors as a whole have been a driver of rising prices, it is apparent that pension investments have not been a material cause of the rising cost of food and energy. As previously mentioned, investments in commodities are a small fraction of CIEBA member pension funds' assets. Further, most

[2] 29 C.F.R. § 2509.94-2.

plans will rebalance their investments periodically to assure that they stay within their guidelines and do not inadvertently get over-exposed to any single asset class. Plans with exposure to commodities or commodity indexes are very likely to sell when prices rise and buy when prices fall in an effort to maintain a constant weighting with respect to the whole portfolio.

Regulating pension investments would make it difficult for pension plans to adequately diversify investments to hedge against market volatility and inflation and, consequently, would put at risk the retirement funds of the very workers the proposal is intended to help. In effect, such a proposal could be a case of robbing Peter to pay Paul.

Again, thank you for this opportunity to testify. Please let me know if there is additional information that you would like to receive from us. We are happy to help you in any way we can.

Testimony of James J. Angel, Ph.D., CFA
Associate Professor of Finance
McDonough School of Business
Georgetown University
Washington DC

Senate Committee on Homeland Security and Governmental Affairs
June 24, 2008

Summary: Our security faces serious challenges from energy and food price inflation. Various forces are involved in this inflation, ranging from production constraints and developing-country demand to interest rates and the value of the dollar.

This testimony discusses three proposals to curb "excessive speculation." However, implementing these proposals by themselves will probably not solve the problem of high commodity prices.

The proposal to close the "swaps loophole" would give the CFTC some useful powers to deal with trading abuses involving OTC substitutes for exchange traded contracts. This proposal should be refined carefully. Overly stringent mandates will drive the business underground and offshore, where it will be harder to regulate and monitor.

I have some serious reservations about the other two proposals. An overly restrictive limit on speculative positions will be easily evaded. It will be too easy for foreign entities such as sovereign wealth funds to conduct their trading in foreign markets, where it will be harder to monitor. Banning institutions from holding commodities would deprive pension funds of a useful diversification tool, and prevent their capital from helping hedgers to hedge.

For the long run, the best way to cut energy and related prices is for the U.S. to quickly adopt a serious and credible policy to transition permanently away from carbon-based fuels, especially those imported from unstable or hostile regions. This transition would pay large economic, national-security, and environmental benefits. Once the markets believe that such a transition is under way, the price of carbon-based fuels will tumble. The U.S. should adopt policies to make sure that the prices of carbon-based fuels do not fall below the prices of environmentally preferable alternate fuels.

Good Morning. I thank the Committee for asking for my views on these important issues. I am an associate professor of finance at the McDonough School of Business at Georgetown University. I regularly teach courses involving the use of derivative financial instruments and have been a frequent commentator on financial regulation. I would stress that my views offered here are my own and do not necessarily reflect those of Georgetown University or anyone else.

The shocking increases in fuel prices are causing serious economic pain to American consumers right now. In addition, the explosion in commodity prices has a strong impact on our homeland security. The cost of imported fuel adds to our trade deficit and further weakens the dollar. The cost of fuel is a major element in fertilizing and harvesting crops, in fishing and logging operations, and in military operations. Our dependence on imported oil from unstable places is a direct threat to our security. The global political turmoil caused by high oil and food prices also impacts our homeland security.

However, I would be remiss if I did not mention the long-term silver lining in this painfully dark cloud. As painful as high energy prices are now, they provide a strong economic incentive for us to move away from fossil fuels. These high energy prices will accelerate our switch to environmentally preferable energy sources such as wind, hydrogen, solar, and nuclear power. To the extent that high energy prices accelerate our switch away from imported fuel, these painfully high oil prices will in the long run enhance our energy independence and our economic as well as military security. Another benefit is to prod us to significantly reduce our carbon dioxide emissions in order to avert a catastrophic climate change – also a homeland security issue as climate change could ignite conflicts and spark massive migrations. Fortunately, both presidential candidates have announced plans for serious reductions in carbon dioxide emissions.

In the world of here and now, however, the distress and disruption inflicted by rapid increases in food and energy prices is intense. We must continue analyzing causes and seeking sensible policies to correct problems or at least mitigate their impacts. If there are defects in the design and regulation of our financial markets we must fix them in order to prevent even worse problems down the road.

There are three basic possibilities to look at the recent increase in energy prices:

First, maybe the markets are right. Maybe the value of the next barrel of oil to our society really is around $135, and we should not be wasting it on less valuable uses. Extremely reputable scientists such as Dr. David Goodstein from Caltech make a plausible argument that we have mined most of the easy oil and that it will get ever more expensive to find more to feed the demands of the growing world economy. Similarly, political instability in the oil producing regions may also lead to a shortage of oil in the near term.

However, this inflation has affected not just oil and bio-fuel crops, but also many other commodities as well. Perhaps this is an artifact of the rise in oil prices as petrodollars from unstable regions get stored in hard assets such as metals.

Second, maybe we are in a super-bubble affecting all commodities. Even though markets have strong financial incentives to find the right price, bubbles sometime occur. Markets are made out crowds of fallible human beings, and crowds sometimes make mistakes. We have lived through the internet and housing bubbles. Could this be another one? If so, is there some defect in market design or government regulation that is inflating the bubble? Or is there some governmental action that should be taken to pop the bubble?

How can we tell if we are in a bubble? Basic economic logic suggests that that the long-term price of a non-renewable resource should be no higher than the price of a renewable substitute. In the short run, prices can go anywhere because it takes time for supply and demand to really adjust to changes in price. I don't have good numbers on the real cost of producing substitutes on an industrial scale because such production does not yet exist, but I suspect that the cost is somewhere in the neighborhood of current prices.

Third, maybe the markets have been manipulated. One of the reasons that the Commodities Exchange Act was passed is that there have been many attempts to manipulate commodity prices. In a classic manipulation, nefarious evildoers quietly buy up the deliverable grade of a commodity as well as the futures, or, in one case, lock up the freight cars needed to deliver the commodity to the delivery warehouse. They then demand delivery and squeeze the sellers who are unable to get their commodity to the delivery warehouse. However, such a classic manipulation leaves lots of evidence behind, as prices in the manipulated contract deviate dramatically from prices of similar grades of material in other locations. This does not appear to be the current case.

It should be noted, incidentally, that even commodity markets that do not have organized futures exchanges have also experienced similar price inflation.

Nonetheless, even some observers who conclude that standard economic factors account for most of the recent price increases must concede the massive growth in non-commercial interest in commodities can affect expectations and thus feed back into spot prices. Senators Lieberman and Collins have floated three proposals to deal with "excessive speculation."

Before I address the specifics of these proposals, I would like to put in a few words in defense of speculation. Speculators – up to a point, at least -- perform three extremely valuable roles in the market:

First, speculators add liquidity to the market. Their willingness to buy or sell based only on price makes it much easier and cheaper for hedgers to hedge when they need to. When the order from a pure hedger arrives at the market, chances are there is not an exactly opposite counter-order from another hedger waiting to trade with it. For example, when the farmer goes to sell wheat in advance with a futures contract, chances are there is not a buy order waiting there from a flour mill. The speculators help to fill in the gaps. They profit by providing a smoothing service that makes it easier for the hedgers to hedge.

Second, speculators bring risk-bearing capacity to the markets, just like insurance companies. In many cases, speculators act like insurance companies selling insurance. This may make it feasible for producers to produce when they might not otherwise be willing to take the risk. For example, higher spot corn prices should encourage farmers to grow more corn. However, some farmers may be unwilling to plant more corn because of the risk that prices will be lower at harvest time. By selling the corn in advance to – gasp! – speculators, the farmer can lock in a price guaranteed to produce a decent income. This ability to get rid of risk may induce some farmers to plant more corn. Similarly, the ability to sell oil in long-term forward or futures contracts may encourage the drilling of some wells that otherwise may not be drilled.

Third, speculators bring their information to the market. When speculators take a position, they have a strong financial incentive to get it right. If they don't, they suffer painful losses and should quickly exit the market. This information affects prices, which send signals to producers and consumers. If the speculators push up prices, that sends a signal to producers to produce more and a signal to consumers to consume less. This helps us get to the socially optimal amount of production and consumption. By making prices accurately reflect the true value to society of an item, speculators are helping markets do their job better.

Speculation is very different from gambling. Speculators take on risk with some plausible expectation of making money. Their ability to bear risk that the hedgers don't want is socially useful. Gamblers take on risk for the pleasure of it without a plausible expectation of making money.

Insufficient speculation may lead to excess volatility. If there are not enough speculators to take the other side of hedgers' trades, then there will be little liquidity in the market. Small orders may make the price jump around too much. I was therefore pleased to see that one of the proposals for limiting speculation would instruct the CFTC to maintain market liquidity.

You can have too much of a good thing. Even though speculators provide many useful functions in markets, they have also been sometimes accused of injecting excess volatility into markets and into manipulating prices. Futures contracts make it easy for anyone to take a position, and to control a large amount of a commodity with a fairly small margin. The high level of leverage involved in futures and other derivatives makes it more likely that speculators who are wrong about the long-term price trend may have a destabilizing impact on prices in the short run. This is one of the reasons why we regulate our markets.

Not taking delivery does not define a speculator. There has also been some confusion in the media in which a speculator is defined as anyone who does not take delivery of the physical commodity in a futures contract. There are some good business reasons why a bona-fide hedger may never want to take delivery under a futures contract. Here is an example. Suppose that you are a soybean farmer in the middle of Pennsylvania. You decide to hedge your crop by selling a futures contract on the Chicago Mercantile Exchange. At harvest time, you have no desire to transport your soybeans all the way to Chicago, so you sell them to the local tofu factory at the market price. You then offset your futures position by buying a futures contract. Your gain or loss on the futures contract, combined with the price

you get in the local spot market at harvest time just about equals the price locked in earlier with the futures contract.

Now I turn to the proposals at hand:

Proposal #1: Closing the "Swaps Loophole"

This proposal directs the CFTC to set aggregate position limits for speculative positions that include over-the-counter or OTC positions. It also narrowly defines bona-fide hedging to apply only to the hedging of physical positions. The intention is to deal with the impact that large investors using OTC derivatives may be having on the markets. Wall Street derivative dealers sell OTC derivatives to both speculators and hedgers, and then hedge their own exposure on the futures exchanges. For example, a refiner far from Cushing, Oklahoma (the delivery point of the NYMEX West Texas Intermediate crude oil futures contract), may want to lock in the price of a different grade of crude at its refinery. It enters into a contract with an OTC derivative dealer for the exact grade and location of crude that it wants. The dealer then hedges on the NYMEX. The dealer may also sell OTC derivatives to speculators as well.

This proposal explicitly extends CFTC authority to some OTC derivatives and directs the CFTC to gather information on them. It changes the decision Congress made in the Section 103 of the Commodity Futures Modernization Act that exempted certain OTC derivatives from CFTC jurisdiction. This is useful because some OTC derivatives are very close substitutes for, and have a big impact on, exchange-traded and regulated futures contracts. This will give the CFTC authority to gather information and to deal with trading abuses that affect the regulated contract markets.

The CFTC should have the power to deal with close substitutes to regulated contracts.

The existence of widely traded OTC contracts that are very close substitutes for regulated contracts raises the possibility that market participants will use such substitutes to evade useful CFTC regulations. It is thus quite reasonable to give the CFTC the ability to investigate and where necessary regulate such close substitutes.

Hedging is defined too narrowly.

OTC derivative dealers serve important economic roles. Basically, they custom tailor risk management and investment products for investors out of the "one-size-fits-all" cloth of the exchange traded products. They are legitimate hedgers, and they need to be treated as such. If the aggregate positions of the end customers are problematic, then regulatory attention should be paid to the end customers, not the dealers.

However, even though regulating OTC substitutes for futures contracts is a useful step, it alone will have limited effectiveness.

Position limits will be easily evaded offshore.

U.S. jurisdiction only applies to U.S. markets and U.S. persons. This could help prevent or prosecute malfeasance by U.S. regulated players, but it will have no effect on sovereign wealth funds and other foreign entities.

Foreign entities will be able to take on whatever positions they want in other markets. It would take an unprecedented – and unlikely - level of global regulatory cooperation to impose position limits around the world.

This proposal ignores the metals markets.

This proposal only applies to energy and agricultural commodities. The current inflation has affected most commodities, including many strategically important metals, and even many that are not traded on futures exchanges. Given the economic linkages between all commodity markets, it does not make sense to ignore metals. There is no reason to exclude metals from a careful extension of CFTC oversight into the OTC market.

Proposal #2: Speculative Position Limits

This proposal would direct the CFTC to set speculative position limits annually for non hedgers "at the minimum level practicable to ensure sufficient market liquidity for the conduct of bona fide hedging activities." I am pleased that this proposal understands the importance of speculators in providing liquidity, but I think it has some problems.

This standard is extremely vague.

I am not sure how anyone would be able to figure out exactly what that the minimum level to ensure sufficient market liquidity really is. Indeed, such a minimum level could be quite large, if all production were hedged by selling to buy and hold speculators. When markets are in turmoil, as they are today, the need – and thus the demand -- for hedging could increase dramatically. At times of market turmoil, one wants the maximum amount of stabilizing capital in the market as possible in order to smooth prices. However, it is difficult to determine which players act a stabilizers and which players do not.

Fortunately, this standard is vague enough that the CFTC can use its professional judgment to figure out the right level. I have much more respect for the CFTC than I do for many of the hundreds of other financial regulators in our country, and I feel that the CFTC can be trusted to do a decent job if they have the right resources. They have already taken numerous steps to exercise their existing authority to deal with the current situation.

Proposal #3: Prohibit Investment in Commodities by Pension Funds and Certain Large Institutional Investors.

This proposal prohibits ERISA pension funds and governmental entities, including sovereign wealth funds (SWFs), from investing in energy and agricultural futures as well as OTC derivatives on energy and agricultural commodities. It would also prohibit some large institutional investors from investing in "a passively managed and broadly diversified index of physical commodities."

I see many problems with this proposal.

The institutions are not the only ones to blame for the increase in prices.

The increase in institutional investment in commodities is but one of many causal factors in the increase in commodity prices. Any buying activity, whether for the Strategic Petroleum Reserve or for an institutional investor will affect the price in the market. Even investors who don't take delivery have an impact on price because their willingness to buy or sell communicates information about value to the rest of the market. However, it is important not to confuse correlation with causality. Other factors are involved in the price increases as well, such as constraints on short-term supplies and concerns that long-term supplies will be ever more expensive to obtain. Even if institutions have contributed to the current situation through herd-like behavior at the wrong time, it is not clear that a permanent ban is in the public interest.

There are plausible reasons for institutions to invest in commodities.

Historically, commodity indices have usually shown a negative correlation with other asset classes such as the S&P500. In short, they have a tendency to go up when stocks go down. This helps institutions to smooth out the fluctuations in the value of their investments. For example, if investors believe that an increase in the price of oil will make the value of the rest of their portfolio decline, then owning some oil can offset some of the pain. Although opinions vary, if you run some plausible assumptions through a typical asset allocation program, you can easily get a 5% or higher allocation to commodities as an asset class.

Prohibiting pension funds and other institutions from using these tools may cause them to experience higher volatility and potentially lower returns, which would harm the participants in the plans.

Institutions can provide important investment incentives in energy.

Recall that speculators bring important risk bearing capacity to futures markets. When institutions purchase oil futures that producers are selling, the institutions help the producers to hedge their price risk. This can create an incentive for energy producers to produce more energy. For example, a producer may own an old well that is not financially feasible to reopen at $80/barrel but would be feasible at $100/barrel. However, the producer may not be willing to invest in reopening the old well because of the volatility of oil prices. By selling the oil in advance on the futures market, the producer can lock in a price that guarantees the financial feasibility of reopening the old well.

The prohibitions are too easy to evade.

Our financial markets are very good at devising substitute products that evade the spirit but not the letter of the law. If there is a solid demand for a product, then the markets will find ways of delivering that product, either here or abroad. For example, the proposed institutional prohibition only applies to a "passively managed and broadly diversified index of physical commodities." An institution could easily get around this by investing in a non-diversified index, or one that had just enough "active" management to get around the passive requirement.

The prohibitions will drive the business offshore where it is harder to monitor.

The U.S. financial markets compete with financial markets around the world. Close substitutes exist for all of the major commodity contracts in foreign markets. The commodity markets are global markets, and the price changes of commodities in foreign countries mirror those in the U.S. If foreign entities are prohibited from doing business here they will simply take their business abroad. This will give a boost to the foreign competitors of the U.S. markets. The exchanges in Dubai, Hong Kong, and Singapore would love the business. It will also put their trading activities even further out of reach of U.S. authorities.

Closing words: What do I recommend?

Our country is faced with two interlocking challenges: An untenable reliance on foreign energy along with the prospect of catastrophic climate change exacerbated by our carbon dioxide emissions. What happens if we do nothing? If we do nothing, we will probably see a repeat of the 1980s and 1990s. The oil industry since its inception has swung back and forth between periods of oversupply and undersupply. When there have been shortages in the past, prices have risen and this caused an investment in new production. When the new production came on line, the industry experienced gluts and prices fell. This led to more consumption and less exploration, eventually leading to new shortages and higher prices.

This cycle will continue. The current increase in prices will naturally induce energy conservation along with an increase in production. Once the new conservation measures and the new energy supplies come on line, the tight energy supply situation will turn into a glut and real prices will fall from their peaks. Our commitment to conservation and alternative fuels will falter. There will be less conservation and less investment in new energy production. Eventually the glut will turn into a shortage and prices will spike and quadruple again. We will once again hand over our treasury to dictators in unstable lands. And we will continue to poison our planet with even more CO_2.

We need to transition away from carbon based fossil fuels. No amount of green exhortations will work as long as fossil fuels are cheap. High prices motivate us to find substitutes.

But what about now? The pain of high prices is real and it is now. It might sound nice in the ivory tower to talk about the incentives from higher fuel prices, but what do we do about the very real economic dislocations that are occurring now? If the current price of oil is above the cost of alternative fuels, then we should do the following:

Give the CFTC the powers and resources needed to regulate close substitutes to exchange-traded products.

If there are abuses going on in the OTC markets that are affecting the regulate markets, our regulators need the powers to deal with it. These powers would include the ability to gather information, provide transparency, as well as set position limits and margin limits when necessary in the public interest. This should apply to all contract markets, not just energy and agriculture. The CFTC should also be charged with considering systemic risks in addition to potential for excess speculation. The CFTC should be asked to study the impact of leveraged hedge funds using leveraged futures contracts on prices. And, as both the Chairman and Ranking Member of this Committee have said, the CFTC should receive the additional budgetary resources it needs for personnel and technology to monitor and police these greatly expanded markets, especially if it is taking on new mandates.

Such expanded powers will probably not bring commodity prices down by themselves, but they can be used to identify and fight abuses. If we are in a speculative bubble not justified by economic reality, the mere prospect of selling forced by the regulators may be enough to reverse the speculative frenzy. However, governments are usually not as adept at markets at determining the correct prices, so such powers should only be used in extreme cases.

Pass a credible "Petroleum and Carbon Phase-out Plan" that creates the right incentives for alternative fuels.

Merely tinkering with CAFE won't fix the problem. As long as gas is cheap and alternatives are expensive, consumers will want gas guzzlers. A credible plan involves investment in research into alternative energy sources and investment in energy conservation. We need to clear the path for wind, nuclear, geothermal, tidal, hydro, solar, and appropriate biofuels. The government can start with its own energy purchases by mandating that 100% of government energy consumption come from renewable and clean sources by 2018.

The economic incentive is already here at today's energy prices. Private investment will rush in as long as we can prevent a repeat of the petroleum glut of the 1980s.

Prices will drop like a rock when we get serious about alternative energy.

Once the markets see that the United States is serious about recovering from its addiction to petroleum and other carbon-based drugs, then the prices of those fuels will drop like a rock. When the producers see that the consumers are switching away from petroleum to technically sound and economic substitutes, they will try to pump – and sell - all they can while there is still any market left for it.

The appropriate economic incentive must prevent the price of carbon-based fuels from falling below the cost of secure and environmentally-sound alternatives.

The temptation to backslide and start guzzling oil again will be huge after prices drop. We need to put a floor on the prices of polluting petroleum based fuels so that they will remain more expensive than more secure alternatives. One way to do this would be to put a conditional tax on oil that would keep the price of oil-equivalents of at least $100 per barrel. For example, if the price is above $100, there would be no tax, but if the price dropped to $80, the tax would be $20. This would provide a good economic incentive for alternative energy producers. In addition, proceeds of the tax could be applied to further eco-friendly energy research and to mitigating transitional costs for consumers and businesses. I am also confident that American ingenuity will help to reduce the cost of alternative fuels as we find better and better ways of harnessing other energy sources.

Testimony of

Michael Greenberger
Law School Professor
University of Maryland School of Law
500 West Baltimore Street
Baltimore, MD 21201

Before the United States Senate Committee on Homeland Security and Government Affairs

Regarding

Ending Excessive Speculation in Commodity Markets: Legislative Options

Tuesday, June 24, 2008
10:30 a.m.
SD-342 Dirksen Senate Office Building

Introduction

My name is Michael Greenberger.

I want to thank the committee for inviting me to testify on the important issue that is the subject of today's hearings.

After 25 years in private legal practice, I served as the Director of the Division of Trading and Markets ("T&M") at the Commodity Futures Trading Commission ("CFTC") from September 1997 to September 1999. In that capacity, I supervised approximately 135 CFTC personnel in CFTC offices in DC, New York, Chicago, and Minneapolis, including lawyers and accountants who were engaged in overseeing the Nation's futures exchanges. During my tenure at the CFTC, I worked extensively on, *inter alia*, regulatory issues concerning exchange traded energy derivatives, the legal status of over-the-counter ("OTC") energy derivatives, and the CFTC authorization of trading of foreign exchange derivative products on computer terminals in the United States.

While at the CFTC, I also served on the Steering Committee of the President's Working Group on Financial Markets ("PWG"). In that capacity, I drafted, or oversaw the drafting of, portions of the April 1999 PWG Report entitled "Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management," which recommended to Congress regulatory actions to be taken in the wake of the near collapse of the Long Term Capital Management (LTCM) hedge fund, including Appendix C to that report which outlined the CFTC's role in responding to that near collapse. As a member of the International Organization of Securities Commissions' ("IOSCO") Hedge Fund Task Force, I also participated in the drafting of the November 1999 report of IOSCO's Technical Committee relating to the LTCM episode: "Hedge Funds and Other Highly Leveraged Institutions."

After a two year stint between 1999 and 2001 as the Principal Deputy Associate Attorney General in the U.S. Department of Justice, I began service as a Professor at the University of Maryland School of Law. At the law school, I have, *inter alia*, focused my attention on futures and OTC derivatives trading, including academic writing and speaking on these subjects. I currently teach a course that I designed entitled "Futures, Options, and Derivatives," in which the United States energy futures trading markets are featured as a case study of the way in which unregulated or poorly regulated futures and derivatives trading cause dysfunctions within those markets and within the U.S. economy as a whole. One result of this dysfunction, as I describe to my students, is the needlessly high prices which energy consumers now pay because of the probability of excessive speculation, illegal manipulation, and fraud within those markets.

The question whether there has been manipulation of U.S. energy futures markets in general, and U.S. delivered crude oil contracts specifically, has been the subject of many hearings. I have previously testified at five of those hearings, the most recent held yesterday before the U.S. House Committee on Energy and Commerce Subcommittee on Oversight and Investigations. To put the issue of today's hearing in context, I summarize and update the relevant points I made at that hearing immediately below.

Summary and Update of Prior Testimony

One of the fundamental purposes of futures contracts is to provide price discovery in the "cash" or "spot" markets. Those selling or buying commodities in the "spot" markets rely on futures prices to judge amounts to charge or pay for the delivery of a commodity.[1] Since their creation in the agricultural context decades ago, it has been widely understood that, unless properly regulated, futures markets are easily subject to distorting the economic fundamentals of price discovery (*i.e.*, cause the paying of unnecessarily higher or lower prices) through excessive speculation, fraud, or manipulation.[2]

The Commodity Exchange Act ("CEA") has long been judged to prevent those abuses. Accordingly, *prior* to the hasty and last minute passage of the Commodity Futures Modernization Act of 2000 ("CFMA"), "all futures activity [was] confined by law (and eventually to criminal activity) to [CFTC regulated] exchanges alone."[3] At the behest of Enron, the CFMA authorized the "stunning" change to the CEA to allow the option of trading energy commodities on deregulated "exempt commercial markets," *i.e.*, exchanges exempt from CFTC, *or any other* federal or state, oversight, thereby rejecting the contrary 1999 advice of the President's Working Group on Financial Markets, which included the Secretary of the Treasury, the Chairman of the Federal Reserve Board, and the Chairmen of the SEC and CFTC. [4] This is called the "Enron Loophole."

Two prominent and detailed bipartisan studies by the Permanent Subcommittee on Investigations' ("PSI")[5] staff represent what is now conventional wisdom: hedge funds, large banks, pension funds, insurance and energy companies, and wealthy individuals have used "exempt commercial energy futures markets" to drive up needlessly the price of energy commodities over what economic fundamentals dictate, adding, for example, what the PSI estimated to be @ $20-$30 per barrel to the price of a barrel of crude oil.[6] At the time of that estimate, the price of crude oil had reached a then record high of $77. The conclusion that speculation has added a large premium to energy products has been corroborated by many experts, including most recently and most

---

[1] *See* Written Testimony of Professor Michael Greenberger, *Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation?: Hearing Before the H. Subcomm. on Oversight and Investigations* 3-5 (2007), *available at* http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1011&context=cong_test (last visited June 21, 2008).

[2] *See, e.g.*, Jonathan Ira Levy, *Contemplating Delivery: Futures Trading and the Problem of Commodity Exchange in the United States, 1875-1905*, AMERICAN HISTORICAL REVIEW 307 (2006) ("'[T]he man who managed or sold or owned those immense wheat fields has not as much to say with the regard to the price of the wheat that some young fellow who stands howling around the Chicago wheat pit could actually sell in a day.'"(quoting *Fictitious Dealings in Agricultural Products: House Comm. on Agric. Committee Hearing Reports* (1892)).

[3] PHILIP MCBRIDE JOHNSON & THOMAS LEE HAZEN, DERIVATIVES REGULATION 28 (Cumm. Supp. 2008).

[4] *Id.*; *see also* PRESIDENT'S WORKING GROUP ON FINANCIAL MARKETS, OVER-THE-COUNTER DERIVATIVES MARKETS AND THE COMMODITY EXCHANGE ACT 16 (1999) ("Due to the characteristics of markets for non-financial commodities with finite supplies, however, the Working Group is unanimously recommending that the exclusion [from regulation] not be extended to agreements involving such commodities.") *available at* http://www.ustreas.gov/press/releases/reports/otcact.pdf (last visited June 21, 2008).

[5] PERMANENT SUBCOMMITTEE ON INVESTIGATIONS OF THE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS, THE ROLE OF MARKET SPECULATION IN RISING OIL AND GAS PRICES: A NEED TO PUT THE COP BACK ON THE BEAT (June 27, 2006) [hereinafter June 2006 Report]; PERMANENT SUBCOMMITTEE ON INVESTIGATIONS OF THE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS, EXCESSIVE SPECULATION IN THE NATURAL GAS MARKET, (June 25, 2007) [hereinafter June 2007 Report].

[6] June 2006 Report, *supra* note 5, at 2, 23.

prominently, George Soros,[7] the International Monetary Fund,[8] OPEC, and the International Energy Agency.[9]

The PSI staff and others have identified the Intercontinental Exchange ("ICE") of Atlanta, Georgia, as an unregulated facility upon which considerable exempt energy futures trading is done.[10] For purposes of facilitating exempt natural gas futures, ICE is deemed a U.S. "exempt commercial market" under the Enron Loophole.[11] For purposes of its facilitating U.S. WTI crude oil futures, the CFTC, by informal staff action, has deemed ICE to be a U.K. entity not subject to direct CFTC regulation even though ICE maintains U.S. headquarters and trading infrastructure, facilitating, *inter*

---

[7] *See, e.g.,* Edmund Conway, *George Soros: rocketing oil price is a bubble*, DAILY TELEGRAPH (May 27, 2008), *available at* http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2008/05/26/cnsoros126.xml (last visited June 21, 2008) (quoting Mr. George Soros as stating "Speculation . . . is increasingly affecting the price"); Written Testimony of Michael Masters, *Hearing Before the Committee on Homeland Security and Governmental Affairs, U.S. Senate* 2 (May 20, 2008), *available at* http://hsgac.senate.gov/public/_files/052008Masters.pdf (last visited June 21, 2008) (quoting Michael W. Masters as stating "Are Institutional Investors contributing to food and energy price inflation? And my unequivocal answer is YES"); Alejandro Lazo, Energy *Stocks Haven't Caught Up With Oil Prices*, WASH. POST (Mar. 23, 2008), *available at* http://www.washingtonpost.com/wp-dyn/content/article/2008/03/21/AR2008032103825.html (last visited June 21, 2008) (quoting Mr. Fadel Gheit as stating "The largest speculators are the largest financial companies"); MICHELLE FOSS, UNITED STATES NATURAL GAS PRICES TO 2015 34 (2007), *available at* http://www.oxfordenergy.org/pdfs/NG18.pdf (last visited June 21, 2008) (asserting "The role of speculation in oil markets has been widely debated but could add upwards of $20 to the price per barrel"); Advantage Business Media, *Economist Blames Subsidies for Oil Price Hike*, CHEM.INFO (2008), *available at* http://www.chem.info/ShowPR.aspx?PUBCODE=075&ACCT=0000100&ISSUE=0609&ORIGRELTYPE=DM&RELTYPE=PR&PRODCODE=00000&PRODLETT=M&CommonCount=0 (last visited June 21, 2008) (quoting Dr. Michelle Foss as stating "We have an overpriced commodity, and this is going to be around for a while"); Kenneth N. Gilpin, *OPEC Agrees to Increase Output in July to Ease Oil Prices*, N.Y. TIMES (June 3, 2004), *available at* http://www.nytimes.com/2004/06/03/business/03CND-OIL.html?ex=1401681600&en=5dbd50c5b369795b&ei=5007&partner=USERLAND (last visited June 21, 2008) (quoting Mr. Kyle Cooper as stating "There is not a crude shortage, which is why OPEC was so reluctant to raise production."); Upstream, *Speculators 'not to blame' for oil prices*, UPSTREAMONLINE.COM, (April 4, 2008), *available at* http://www.upstreamonline.com/live/article151805.ece (last visited June 21, 2008) (quoting Mr. Sean Cota as stating "It has become apparent that excessive speculation on energy trading facilities is the fuel that is driving this runaway train in crude prices"); Mike Norman, *The Danger of Speculation*, FOXNEWS.COM (Aug. 19, 2005), *available at* http://www.foxnews.com/story/0,2933,166038,00.html (last visited June 21, 2008) (Mr. Norman stating "Oil prices are high because of speculation, pure and simple. That's not an assertion, that's a fact. Yet rather than attack the speculation and rid ourselves of the problem, we flail away at the symptoms.").

[8] INTERNATIONAL MONETARY FUND, REGIONAL ECONOMIC OUTLOOK: MIDDLE EAST AND CENTRAL ASIA 27-28 (2008) ("Producers and many analysts say it is speculative activity that is pushing up oil prices now. Producers in particular argue that fundamentals would yield an oil price of about US $80 a barrel, with the rest being the result of speculative activity."); *see also* Neil King Jr., *Saudi Arabia's Leverage In Oil Market Is Sapped*, WALL STREET J. (June 16, 2008), *available at* http://online.wsj.com/article/SB121355902769475555.html?mod=googlenews_wsj (last visited June 21, 2008) (quoting Saudi Oil Minister Ali Naimi as saying skyrocketing oil prices were "unjustified by the fundamentals" of supply and demand).

[9] In a rare move representatives of the world's largest oil producers and consumers have issued a joint working paper in advance of a joint summit on oil prices yesterday, which calls for worldwide regulation to "tackle issues" and to "improve the transparency and regulation of financial markets though measures to capture more data on index fund activity and to examine cross exchange inter-actions in the crude market." Bernd Radowitz & Reem Shamseddine, *Oil Summit to Take on Speculators*, WALL ST. J. (June 21, 2008), *available at* http://www.moneyweb.co.za/mw/view/mw/en/page94?oid=211868&sn=Detail (last visited June 22, 2008).

[10] *See* June 2007 Report, *supra* note 5, at 27.

[11] *See id.* at 42.

alia, @ 30% of trades in U.S. WTI futures.[12] The Dubai Mercantile Exchange, in affiliation with NYMEX, a U.S. exchange, has also been granted permission to begin trading the U.S. delivered WTI contract on U.S. terminals, but is, by virtue of a CFTC no-action letter, to be regulated by the Dubai Financial Service Authority ("DFSA").[13]

NYMEX itself, the U.S. premier regulated energy futures contract market, is reported to be planning to have a London trading platform registered with the U.K.'s FSA,[14] after which it would apply for the foreign board of trade no action relief that has already been granted to ICE and DME. Providing NYMEX's London trading platform with this kind of no action relief would convert full U.S. regulation of the most important crude oil futures contracts to substantial U.K. oversight. These staff informal actions effectuating the exemptions for "foreign" owned U.S. trading terminals by their own terms make it clear that they may be instantly revoked by the CFTC.[15]

One final gap in the oversight of speculation in the U.S. crude oil and agricultural markets was dramatically illuminated in the testimony of Michael W. Masters, Managing Member of Masters Capital Management, LLC, before this Committee on May 20, 2008.[16] Mr. Masters demonstrated that large financial institutions, such as investment banks, which were "hedging" their off exchange futures transactions on energy and agricultural prices on U.S. regulated exchanges, were being treated by NYMEX, for example, and the CFTC as "commercial interests," rather than as the speculators.[17] By lumping large financial institutions with traditional commercial oil dealers (or farmers),[18] even fully regulated U.S. exchanges were not applying traditional and time tested speculation limits to the transactions engaged in by these institutions.[19] Mr. Masters persuasively demonstrated that a significant percentage of the trades in WTI futures, for example, were controlled by what in common parlance and common sense would be considered non-commercial interests.[20] These exemptions from speculation limits for large financial institutions hedging off exchange

---

[12] *See* Written Testimony of Professor Michael Greenberger, *Energy Market Manipulation and Federal Enforcement Regimes: Hearing before the S. Comm. on Commerce, Science, and Transportation*, 3 (2008), *available at* http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1026&context=cong_test (last visited June 21, 2008).

[13] Dubai Mercantile Exchange Ltd., CFTC No-Action Letter, 2007 CFTC Ltr. LEXIS 6 (May 24, 2007).

[14] Jeremy Grant, *Nymex's Long Road to the Electronic Age*, FINANCIAL TIMES (Feb. 17, 2006), at 39 ("Nymex has indicated that it might be forced to move its electronically traded WTI to London so that it can compete on a level playing field with ICE.").

[15] *See* Greenberger, *supra* note 1, at 11-12 (providing a complete discussion of the no-action letter process including termination).

[16] Written Testimony of Michael Masters, *Hearing Before the Committee on Homeland Security and Governmental Affairs, U.S. Senate* (May 20, 2008), *available at* http://hsgac.senate.gov/public/_files/052008Masters.pdf (last visited June 21, 2008).

[17] *Id.* at 7-8.

[18] Gene Epstein, *Commodities: Who's Behind The Boom?*, BARRON'S 32 (March 31, 2008) ("The speculators, now so bullish, are mainly the index funds. . . . By using the [swaps dealers] as a conduit, the index funds get an exemption from position limits that are normally imposed on any other speculator, including the $1 in every $10 of index-fund money that does not go through the swaps dealers.")

[19] Masters, *supra* note 16, at 7.

[20] *Id.* at 8, 11. In testimony given by George Soros before the Senate Commerce Committee on June 3, 2008, he reached much the same conclusion as has Mr. Masters. Matthew Leising, *Soros Says Record Oil Prices Result of "Bubble,"* BLOOMBERG (June 3, 2008). He concluded there that commodity index investment is "not a legitimate asset class." *Id.*

"swaps" transactions emanates from a CFTC letter issued on October 8, 1991[21] and which have continued to be issued I am told as recently as last week.

Again, while the principal focus to date has been on skyrocketing energy prices, Mr. Masters' testimony before this Committee, aided by a widely discussed cover story in the March 31, 2008 issue of *Barron's*,[22] have made clear that the categorization of swaps dealers outside of speculative controls even on U.S. regulated contract markets, has been a cause of great volatility in the farm belt, as well as the energy markets.

Virtually all parties now agree the Enron, London/Dubai, and Swaps Dealers Loopholes must be closed. On June 18, 2008, the Food Conservation and Energy Act of 2008[23] (the "Farm Bill") was enacted into law by a Congressional override of President Bush's veto. Title XIII of the Farm Bill is the CFTC Reauthorization Act of 2008, which, in turn, includes a language providing the CFTC with authority to require on a case-by-case basis that a now unregulated energy futures contract be brought within the regulatory requirements of a U.S. regulated contract market. To accomplish this result, the CFTC must that the contract "serve[s] a significant price discovery function."[24]

It has also been widely reported that the CFTC intends to use the new legislation to demonstrate that only a single unregulated natural gas futures contract, *and not any crude oil futures contracts*, should be removed from the Enron Loophole and become fully regulated. Thus, by the CFTC's view of this legislation, crude oil, gasoline, and heating oil futures contracts will not be covered by the new legislation.

The CFTC has also made it clear that the Farm Bill amendment will not cover any U.S. delivered futures contracts traded on the U.S. terminals of foreign exchanges operating pursuant to CFTC staff no action letters. As mentioned above, the Intercontinental Exchange ("ICE") of Atlanta, Georgia, for purposes of facilitating U.S. delivered WTI crude oil futures, has been deemed by the CFTC, through an informal staff no action letter, to be a U.K. entity not subject to direct CFTC regulation even though ICE maintains U.S. headquarters and trading infrastructure, facilitating, *inter alia*, @ 30% of trades in U.S. WTI futures. Moreover, the Dubai Mercantile Exchange ("DME"), in affiliation with NYMEX (a U.S. exchange) has also been granted permission to trade the U.S. delivered WTI contract on U.S. terminals, but is, by virtue of a CFTC no action letter, to be regulated by the Dubai Financial Service Authority ("DFSA"). Again, the CFTC will not rely on the plain language of the Farm Bill amendment to close the "London/Dubai" Loophole.

The "Swaps Dealer" Loophole was only brought to the attention of Congress through this Committee's May 20, 2008 hearing and thus that problem was not addressed by the Farm Bill amendment.

---

[21] J. Aron & Co., CFTC Interpretive Letter, 1991 CFTC Ltr. LEXIS 18 (Oct. 8, 1991).

[22] Gene Epstein, *Commodities: Who's Behind The Boom?*, BARRON'S 32 (March 31, 2008) ("The speculators, now so bullish, are mainly the index funds. . . . By using the [swaps dealers] as a conduit, the index funds get an exemption from position limits that are normally imposed on any other speculator, including the $1 in every $10 of index-fund money that does not go through the swaps dealers.").

[23] Food Conservation and Energy Act of 2008, Pub. L. No. 110-246, § 13201; 122 Stat. 1651 (2008).

[24] *Id.*

The Many Bills Now Pending Aimed at Closing the Enron, London/Dubai, and/or Swaps Dealers Loopholes

In the wake of the skyrocketing cost of, *inter alia*, gasoline and heating oil over the last few weeks, a great deal of legislation has been introduced to close each of the loopholes blamed for allowing speculation to go unpoliced in the U.S. energy futures markets.

For example, Chairman Bart Stupak, of the House Energy and Commerce Subcommittee on Oversight and Investigations, introduced last Friday, June 21, 2008, legislation that requires, *inter alia*, all energy futures contracts executed in the U.S. to be traded on U.S. regulated contract markets, thereby fully reversing the Enron Loophole by returning all energy futures trading to where it was immediately prior to that provision's passage, i.e., on regulated exchanges;[25] expressly bars over the counter (i.e., trading outside of a regulated U.S. contract market) energy futures "swaps" involving transactions of futures energy contracts to be delivered in the U.S. or conducted using computer terminals in the U.S;[26] and nullifies after a grace period all no actions letters previously granted to exchanges trading futures energy contracts to be delivered in the U.S. or using computer terminals in the U.S.[27]

Senators Cantwell (D-WA) and Snowe (R-ME) have introduced legislation directed to the London/Dubai Loophole that would require all trading on U.S. platforms to be governed fully and directly by U.S. futures law.[28] Senator Nelson (D-FL) has introduced legislation that would close completely the Enron and Swaps Dealer Loophole by requiring all energy futures contracts to be traded on regulated exchanges.[29] Senators Durbin (D-IL) and Levin (D-MI), *inter alia*, have introduced legislation designed to close the London/Dubai Loophole by ratcheting up CFTC oversight of both the foreign regulator and foreign exchange trading energy futures on U.S. terminals.[30]

Congressman Van Hollen (D-MD) and Congresswoman DeLauro (D-CT) last week introduced legislation that mirrors in result Chairman Stupak's bill to close the Enron, London/Dubai, and Swaps Dealer Loopholes.[31]

---

[25] PUMP Act (2008), H.R., 110th Cong. § 2(a), *available at* http://www.house.gov/stupak/pumpbill.pdf.
[26] *Id.* at § 2(b).
[27] *Id.* at § 2(e)(2).
[28] Policing United States Oil Commodities Markets Act of 2008, S. 3122, 110th Cong. (2008), *available at* http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:s3122is.txt.pdf (last visited June 21, 2008).
[29] S. 3134, 110th Cong. (2008), *available at* http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:s3134is.txt.pdf (last visited June 21, 2008).
[30] Increasing Transparency and Accountability in Oil Prices Act of 2008, S. 3130, 110th Cong. (2008), *available at* http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:s3130is.txt.pdf (last visited June 21, 2008).
[31] Energy Markets Anti-Manipulation and Integrity Restoration Act, H.R., 110th Cong. (2008).

Senators Lieberman's and Collin's Proposed Options to Control Speculation Energy Futures Markets

Chairman Lieberman and Ranking Member Collins have approached closing these loopholes for speculators through somewhat different devices than discussed above, but, most importantly, their proposals focus on dysfunctions caused by speculation in both the energy *and* agricultural futures markets.

On June 18, 2008, Senators Lieberman and Collins introduced three proposals for discussion purposes designed to drain excessive speculation from the energy and agricultural markets.

The first proposal for discussion would require the CFTC to promulgate tight speculation limits on futures traders, who are not bona fide commercial hedgers involved with managing risk relating to businesses engaged in buying or selling the underlying physical agricultural or energy commodity.

One of the foremost tools used to ensure that futures markets are controlled by economic fundamentals has been the establishment of maximum position limits on non-commercial futures traders in order to prevent "excessive speculation . . . causing sudden or unreasonable fluctuations or unwarranted changes in the price" of a commodity.[32]

Bona fide commercial hedgers are generally exempted from these limits.[33] The CFTC has used this power to directly set such limits on the trading of certain agricultural commodities, but has otherwise delegated to its regulated contract markets the establishment of these limits.[34] These limits are not aggregated across contract markets, i.e., a non-commercial trader may have different limits separately imposed by each contract market in which he or she is trading without those markets knowing the full extent of the trader's speculation across all markets.

Moreover, to the extent energy futures may be traded off exchange by virtue of the Enron Loophole, that trading is almost always unencumbered by such limits. Because agricultural futures were not deregulated,[35] they must be traded on an CFTC sanctinoed exchange and therefore are subject to these limits. However, to my mind inexplicably, the agricultural index funds are traded off exchange as Mr. Masters' testimony and the business media have made clear. That would seem to be in contravention of existing law. While there is a general swaps exemption within the statute that might arguably free these swaps from regulation, that exemption is by its terms only applicable to financial swaps[36] –not to agricultural index funds traded off exchange. Finally, many FBOTs with U.S. trading terminal rights in the U.S. similarly do not impose speculation limits either within the U.S. or in their home country.[37]

---

[32] 7 U.S.C. § 6a(a).
[33] 17 C.F.R. § 150.5.
[34] PHILIP MCBRIDE JOHNSON & THOMAS LEE HAZEN, DERIVATIVES REGULATION 41718 (2004 ed.).
[35] *See supra* page 7.
[36] 7 U.S.C. § 2(g).
[37] *See* FSA Handbook, Rec. § 2.6.1-2, *available at* http://fsahandbook.info/FSA/html/handbook/REC/4/2D (last visited June 22, 2008); Jeremy Grant, *CFTC in talks to plug 'London loophole,'* FINANCIAL TIMES (June 10, 2008), *available at* http://www.ft.com/cms/s/0/b962d938-3716-11dd-bc1c-0000779fd2ac.html (last visited June 22, 2008).

Because the Lieberman/Collins speculation limits option as applied to U.S. traders would be aggregated across all exchanges, i.e., U.S. regulated, over-the-counter or foreign, the proposal should have a considerable ameliorating effect in dampening excessive speculation in both the unregulated energy and agricultural futures markets, especially with regard to off exchange energy and index funds.

My own view is that either in isolation or joined with other pending legislation eliminating the swaps exemption for energy futures contracts,[38] the first Lieberman/Collins option would have a significant on controlling excessive speculation in the energy and food sectors, thereby lowering the cost of gasoline and food for the American consumer.[39]

The second Lieberman/Collins legislative option would require the CFTC develop speculation limits on each contract traded, rather than by application to individual traders. In other words, as I understand it, there would be limits established by either the CFTC or the U.S. regulated contract markets on the "share" of a contract eligible to speculators. While the second proposed option would likely have much the same effect as the first, I am concerned that it would encourage a "race" to the exchange allowing large institutional investors with sophisticated trading terminals to crowd out smaller investors not able to move as quickly to take part in that share of a contract limited to speculation.

The third option introduced for discussion would place absolute restrictions on public and private pension funds with assets of more than $500 million from participating in the commodity markets in general, including regulated, over-the-counter or foreign markets; place a similar financial ceiling on U.S. or foreign governmental entities (such as public university endowments or sovereign wealth funds) from participating in agricultural or energy markets unless there was a bona fide commercial need to do so; and, finally, the $500 million asset ceiling would be applied to all institutional investors with regard to what are commonly referred to as the agricultural and energy index funds.

Again, the soaring inflationary impact of speculation in the agricultural and energy markets clearly demands strong measures. Moreover, inasmuch as the informed wisdom of respected experts is that soaring food and energy prices reflect a bubble that will at some point burst, there is a legitimate concern about limiting the participation of pension funds and endowments in these markets. As was true in the complex investment vehicles associated with the housing bubble, today's nice profits may well be tomorrow's crippling losses. Finally, the "ceilings" imposed in option three would be much easier to administer than developing aggregated speculation limits by investor (as in option one) or by market (as in option two).

---

[38] As mentioned above, it is my judgment at this time that any off exchange agricultural swaps are in violation of the CFMA. Because of the seeming substantial adverse impact on inflationary pressure in the agricultural sector, those indices may very well be challenged by the private right of action or parens patriae provisions within the Commodity Exchange Act. The existing bar to off exchange agricultural swaps may also very well be the reason no legislator has yet introduced a bill to bar agricultural swaps. Whatever the lawfulness of off exchange agricultural index funds, the first Lieberman/Collins option would have an ameliorating effect draining excessive speculation from those investments.

[39] Chairman Stupak also includes within his recently introduced legislation the aggregation of speculation limits across all futures markets and eliminating speculation limit exemptions for swaps dealers on U.S. regulated contract markets. PUMP Act (2008) at § 2.

That being said, I worry about the possible unintended consequences of hard across the board limits on investment strategies of those institutions exceeding the proposal's ceiling or bar. In this regard, I view the first option proposed to be so appealing and effective, i.e., aggregated speculation limits on U.S. traders applicable to regulated, over-the-counter, and foreign markets, that my judgment is that the hard and fast ceilings should be not be viewed as preferably as the proposal in option one.

Other Considerations

I would also recommend that this Committee seriously consider proposals beyond speculative controls that have been proposed to otherwise all agricultural and energy futures executed within the U.S. into a fully transparent regulatory system. I say this, because while speculation limits will be therapeutic, there are other substantial abuses in unpoliced markets that have been recognized as unhinging those markets from economic fundamentals, including fraud and manipulation engaged in by those who may be well within the applicable speculation limits.

In this latter regard, one only needs to looks at the emergency and self-regulatory tools afforded the CFTC and its regulated contract markets to see the way in which these markets are monitored for malpractices beyond concerns about excessive speculation.

Those additional tools include large trader reporting that informs the CFTC and its markets about the real party in interest in trading and whether those parties are engaged in "front running or trading ahead of a customer; wash or accommodation trading (transactions creating the appearance of trading activity, but which have no real economic effect); prohibited cross trading (trading directly or indirectly with a customer except under very limited circumstances, or matching two customer orders without offering them competitively); prearranged trading; and non-competitive trading."[40]

Described as the CEA's "most potent tool," section 8a (9) provides that "whenever [the CFTC] has *reason to believe* that an emergency exists," it may take such actions "including, but not limited to "the setting of temporary emergency margin levels on any futures contract [and] the fixing of limits that may apply to a market position."[41] An "emergency" is defined:

> to mean, in addition to threatened or actual market manipulations and corners, any act the United states or a foreign government affecting a commodity or any other major market disturbance *which prevents the market from accurately reflecting the forces of supply demand for such commodity.*[42]

Finally, the "core principles" within the CEA that are applicable to approved U.S. regulated contract markets emphasize the importance of having those markets regulated though aggressive surveillance practices which serve as the first line of defense for the CFTC in detecting fraud, manipulation, excessive speculation, and other unlawful trading malpractices.[43]

---

[40] 7 U.S.C. §§ 12(a) & (c) (2008).
[41] 7 U.S.C. § 12a(9) (2008) (emphasis added).
[42] *Id.* (emphasis added).
[43] 7 U.S.C. § 7(d)(2)-(6) (2008); (2) (compliance with rules); (3) (contracts not readily subject to manipulation); (4) (monitoring of trading); (5) (position limits); (6) (emergency authority); 7 U.S.C. § 7a(d)(2)-(3) (2008); (2) (compliance with rules); (3) (monitoring of trading).

Without aggressive self-policing of the entirety of the regulated U.S. futures markets, the CFTC simply cannot do its job.

Again, neither the over-the-counter market nor the foreign exchanges with terminals in the U.S. which are regulated by their home country have as a general matter effective large trader reporting, emergency intervention powers, or self-regulation. Since each of these tools is time tested measure to ensure that these markets are *"accurately reflecting the forces of supply demand for [a] commodity,"* serious consideration should be joining with this Committee's proposed speculation controls.

With regard to U.S. futures trading executed in the United States, especially insofar as that trading so dramatically impacts prices consumers pay for their everyday needs, the American public deserves the application of these time tested regulatory protections in these critically important U.S. markets.

Finally, I want to congratulate this Committee for providing a continuing and highly influential forum for a serious and thorough discussion of these issues and for the thoughtfulness of the options it has introduced for debate. The impact of the futures markets has been little understood by the American public, possibly seeming as arcane as the workings of the stock markets were to Americans in the 1920's. The economic hardship the country is presently experiencing from soaring food and energy prices, as well as the credit crunch, demand a more thorough understanding of these often opaque financial institutions. Educating the public is the best weapon we have to avoid the need to make same kind of analogies to the 1930's, as I now make to the decade that preceded it.+

Statement of the American Farm Bureau Federation

FOR THE RECORD TO:

SENATE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

Re: Fuel Subsidies: Is there an Impact on Food Supply and Prices?

May 7, 2008

---

600 Maryland Ave. SW | Suite 1000W | Washington, DC 20024 | p. 202.406.3600 | f. 202.406.3606 | www.fb.org

The American Farm Bureau Federation (AFBF) submits this statement to the Senate Committee on Homeland Security and Governmental Affairs of the U.S. Congress on the subject of the U.S. and global food situation. The United States has been and continues to be the world largest agricultural producer and food exporter. Large and fertile land resources, available water, technologically advanced producers, academic and commercial research coupled with advanced seeds, fertilizers and machinery will all continue to provide food for the U.S. and for growing demands around the world. A positive environment for the business of agriculture with the support of local, state and federal government policy has contributed and will continue to contribute to an efficient and growing agricultural production sector in the United States.

Changing world economics are affecting the production and pricing of agricultural commodities. The Food and Agriculture Organization of the United Nations, in a February 2008 report, identifies the rising cost of energy, increased worldwide demand, weather impacts on crop production, lower stocks levels, and the production of biofuels and the operation of financial markets as part of the current global food situation. This has resulted in world price increases of 80 percent for some products from 2005 to 2008.

The following factors are influencing global food production and pricing:

Energy Prices. The global food system is heavily dependent on petroleum for production, processing, packaging and shipping. As the price of oil rises so do the costs of growing, processing and delivering food to consumers. As an example, freight rates have doubled during a one-year period beginning February 2006. Additionally, farmers in the United States have seen their fertilizer expenses increase by about 90 percent over the past five years, while diesel prices have increased by about 135 percent over the same period.

Demand. Economic development and income growth in important emerging countries have been gradually changing the structure of demand for food commodities. China and India have millions of people now benefiting from rising incomes and improving diets. Increases in meat consumption translate directly into increased demands for feed grains for livestock production. In China, per capita meat consumption has increased from 20kg (44lbs.) in 1980 to 50kg (110lbs.) today. Also, China's soy meal use has increased 1500 percent.

Weather Related Shortfalls. Output in the eight major exporting countries dropped by 4 percent and 7 percent in 2005 and 2006, respectively. As an example, Australia has experienced a protracted drought resulting in reduced wheat production directly impacting world wheat markets and prices. Production there plummeted from 25 million tons in 2005 to 10 million tons in 2006 and to 13 million tons in 2007.

Stocks levels. World cereal stocks are at their lowest level since 1982. Since 1995 stock levels have on average declined by 3.4 percent per year. At the close of the 2008 season, world cereal stocks are expected to decline a further 5 percent. Rice availability is always an issue. More than 90 percent of rice is consumed in the country where it is grown. As consumption has outpaced production, world rice reserves have been reduced. To deal with inflationary pressures, some countries have enacted export restrictions. Consequently, nations that depend on rice imports, such as the Philippines, are experiencing price increases due to restricted supply.

Biofuels. The emerging biofuels market is a new source of demand for agricultural commodities. Corn production increased in the U.S. from 10.5 billion bushels in 2006 to 13.1 billion bushels in 2007. Use of corn for ethanol production increased from 2.1 billion bushels in 2006/07 to 3.1 billion bushels in 2007/08. The by-product of ethanol production is also used as livestock feed. Exports of corn increased from 2.1 billion bushels in 2006/07 to 2.5 billion bushels in 2007/08.

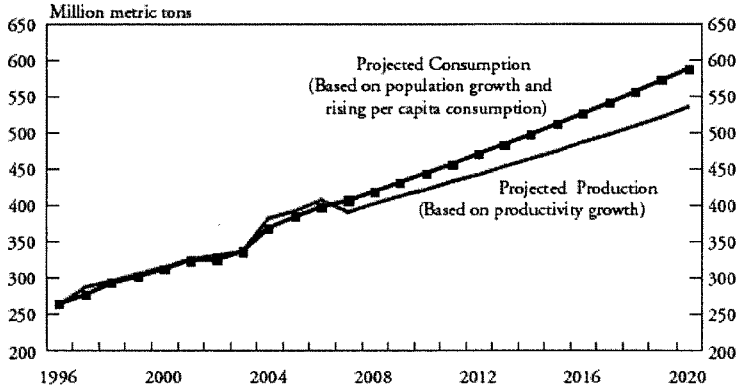
Financial markets. Investments in financial instruments for agricultural commodities are having a role in pricing. These outside investments have put upward pressure on domestic and world grain and oilseed prices.

As noted previously, nations are increasingly restricting exports of agricultural commodities or taking other measures in order to maintain or lower domestic food prices. Of the 58 countries tracked by the World Bank, 48 have imposed price controls, consumer subsidies, export restrictions or lower tariffs. China, Russia, Cambodia, Kazakhstan, Argentina, Brazil, Ukraine and Indonesia have instituted export bans on a variety of commodities. India and Vietnam have restricted the outward flow of rice. Striking farmers in Argentina are another example of supply disruptions affecting world commodity availability. Once a hoarding mentality sets in, it can create irrational behavior.

Long-term, the answer has to be more productive approaches to agriculture around the world. Deciding to forgo technologies that can significantly improve yields, reduce pesticide needs and provide for greater output (as Europe, Japan and some other countries have elected to do) places a major cost on developing and other economies.

This was a warning issued over 10 years ago that was ignored or even scoffed at at the time. The chart below from the Kansas City Federal Reserve Board The Main Street Economist – Regional and Rural Analysis, May 2008 publication, *What's Driving Food Price Inflation?* http://www.kc.frb.org/RegionalAffairs/MainStreet/MSE_0108.pdf illustrates the growing issue of consumption and production as related to oilseeds. The situation however is not unique to oilseeds.

Projected World Oilseed Consumption and Production



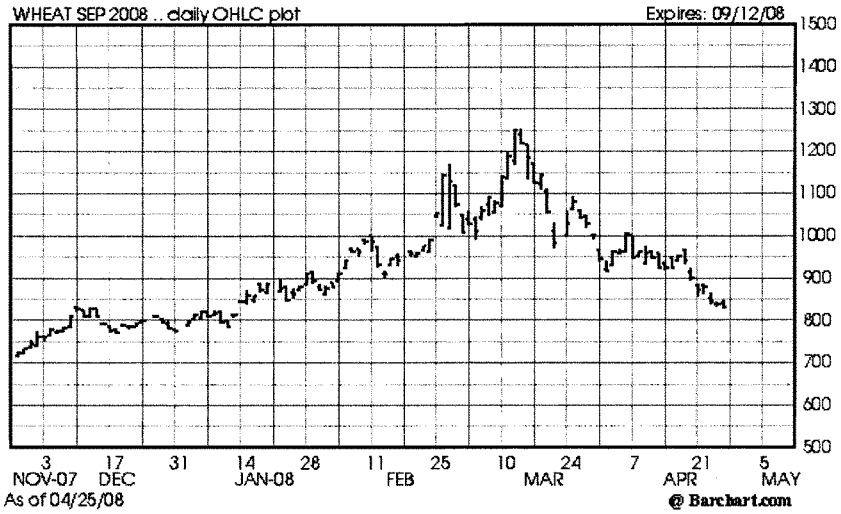
Sources: Calculations based on USDA and U.S. Census Bureau data.
Notes: Agricultural productivity and per capita consumption growth from 1994 to 2007 are expected to hold through 2020.

Wheat Markets

Wheat is one commodity that has drawn attention in stories regarding food prices. After three consecutive years of weather-related production problems, world wheat production appears to be poised to set a new record, up 7 percent from last year and 3 percent above the 2004/05 record according to the International Grain Council. Production is expected to exceed consumption for the first time in four years.

U.S. wheat production is expected to increase about 13 percent in 2008.

Wheat futures prices topped out in late-February/early March and have subsequently declined $4-5 per bushel.

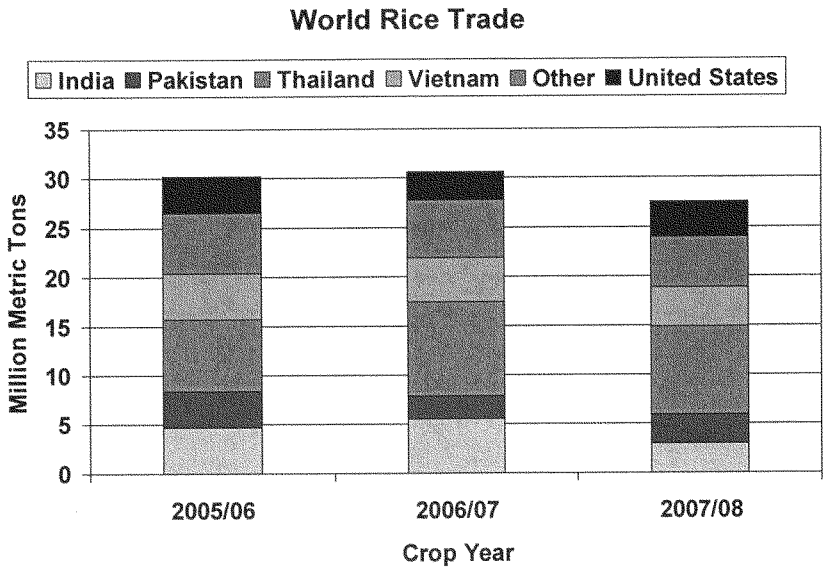


Rice Markets

Rice is referred to as a 'thin' market because the amount that actually shows up in world trade is small compared to the amount that gets consumed in the countries where it is produced. With global rice consumption at 424 million metric tons (MMT) this year, roughly 93 percent of rice is consumed in the country in which it is produced, leaving only 6 percent to 7 percent (27 MMT) to actually trade in global markets. Yet, it is this traded quantity that determines the world price for rice. It takes only small disruptions in this 6 percent to 7percent of the world's rice trade for prices to move sharply.

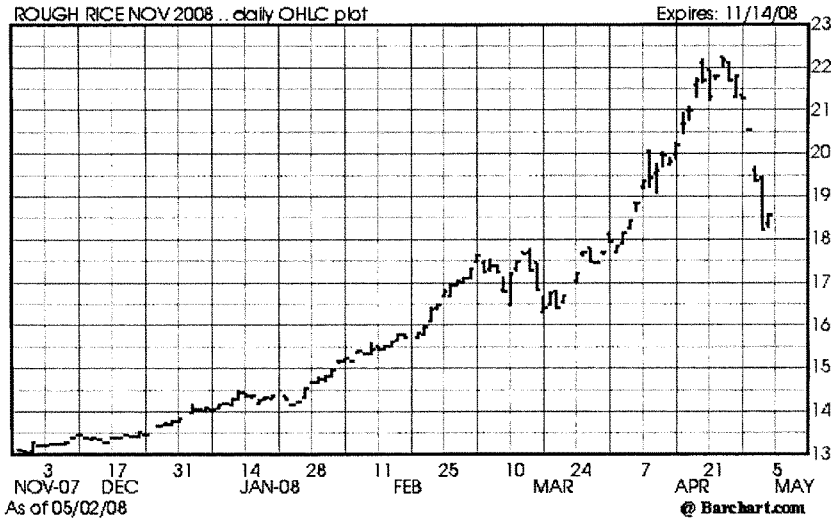
Reports of rice shortages come in the face of three consecutive years of slowly growing world rice production. Production for the coming year is expected to rise by 1.8 percent. Also estimated world ending stocks of rice have been essentially unchanged over that period of time.

To the extent there are actual rice shortages in some areas of the world, they have been caused by countries hoarding supplies and withholding traditional exports in order to try to mitigate domestic inflationary pressures. Among the major rice exporters restricting exports are countries like India and Vietnam. But the effects on the overall trade numbers for rice have been relatively small, as shown in the attached graphic:



This small decline in trade, coming at the same time as these announcements regarding trade restrictions, has caused considerable distress in specific markets, sufficient to drive prices sharply higher.

As in wheat markets, rice prices have also moved sharply lower in the last few days. Driven by announcements from Thailand, the expectations of larger crops this year, rice priced in Chicago has had a number of limit down days in the last week, only showing some signs of stabilizing at the end of last week with a large tender from the Philippines.



Responding to food emergencies
AFBF has been supportive of the arsenal of food aid programs administered by USDA and USAID. These programs provide relief to millions of hungry through out the world by allowing the United States to provide fundamental resources for food security, development and humanitarian relief in developing countries. American farmers take pride in the fact that the products they produce can help so many in need. Farm Bureau has been supportive of increased funding and reauthorization of all farm bill food aid programs. These programs include Public Law 480 Titles I and II, the McGovern-Dole International Food for Education and Child Nutrition Program, and Food For Progress.

The **Food for Progress** program, authorized by the Food for Progress Act of 1985, provides for the donation or credit sale of U.S. commodities to developing countries and emerging democracies to support democracy and an expansion of private enterprise. The implementing organizations request commodities, and USDA purchases those commodities from the U.S. market. USDA donates the commodities to the implementing organizations and pays for the freight to move the commodity to the recipient country. Depending on the agreement, the commodities donated through Food for Progress may be sold in the recipient country, and the proceeds used to support agricultural, economic, or infrastructure development programs. Assistance is provided through foreign governments, Private Voluntary Organizations (PVOs), non-profit organizations, cooperatives, and intergovernmental organizations. The program is limited by a statutory requirement that freight costs do not exceed $40 million. USDA supports about 15-20 projects each year that impact more than a million people.

P.L. 480, Title I–Trade and Development Assistance, provides for government-to-government sales of U.S. agricultural commodities to developing countries on credit or grant terms. Depending on the agreement, commodities provided under the program may be sold in the recipient country and the proceeds used to support agricultural, economic, or infrastructure development projects. Agreements under the Title I credit program may provide for repayment terms of up to 30 years with a grace period of up to 5 years. The authority also allows for grant programs, which have outnumbered loans in recent years.

P.L. 480, Title II–Emergency and Private Assistance, provides for the donation of U.S. agricultural commodities to meet emergency and nonemergency food needs in other countries, including support for food security goals. Agricultural commodities donated by the U.S. government to meet emergency needs are traditionally provided through the World Food Program or PVOs, though they may also be provided under government-to-government agreements. Nonemergency assistance may only be provided through PVOs, cooperatives and intergovernmental organizations.

The **McGovern-Dole International Food for Education Program** helps support education, child development and food security for some of the world's poorest children. It provides for donations of U.S. agricultural products, as well as financial and technical assistance, for school feeding and maternal and child nutrition projects in low-income, food-deficit countries that are committed to universal education. The commodities are made available for donation through agreements with PVOs, cooperatives, intergovernmental organizations, and foreign governments. Commodities may be donated for direct feeding or for local sale to generate proceeds to support school feeding and nutrition projects.

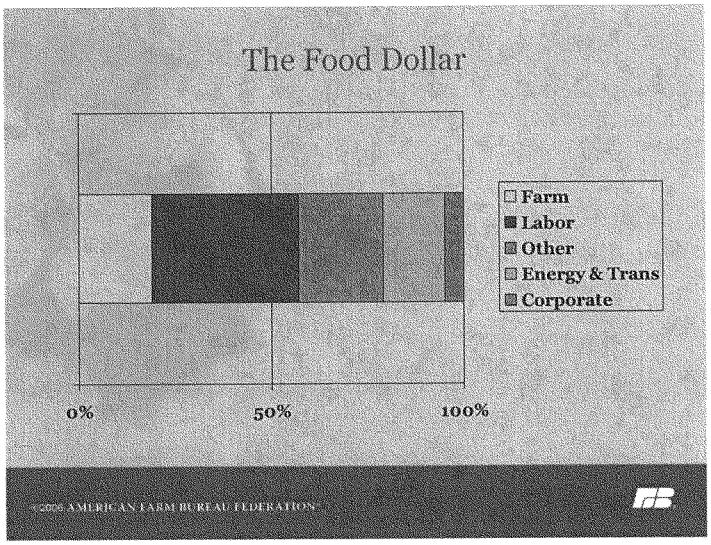
The **Bill Emerson Humanitarian Trust (BEHT)** is another important resource to ensure that the U.S. government can respond to emergency food aid needs. The Emerson Trust is not a food aid program, but a food reserve administered under the authority of the secretary of agriculture. U.S. commodities from this reserve for P.L. 480 can be used to respond to humanitarian food crises in developing countries, particularly those that emerge unexpectedly. Up to 4 million metric tons of U.S. wheat, corn, sorghum and rice can be kept in the reserve. The secretary of agriculture is authorized to release commodities from the Emerson Trust to provide food aid for emergency needs that cannot otherwise be met through P.L. 480.

These programs represent more than $2 billion in food aid support from the U.S. government and U.S. farmers and help millions of people in developing countries with food needs. While current funding for these programs may not always be enough, Farm Bureau has been supportive of congressional action for supplemental funding to meet these needs. Farm Bureau is currently requesting that Congress fund an additional $550 million for PL 480 Title II to address recent concerns with food shortages. Farm Bureau also supported the recent release of $200 million from the BEHT.

Biofuels

Some in the media and other interested parties have wrongly focused on biofuels like ethanol for all or even a majority of the increase in food prices. In fact, there are many factors behind increasing food costs.

The chart below from the Kansas City Federal Reserve Board illustrates these factors http://www.kc.frb.org/RegionalAffairs/MainStreet/MSE_0108.pdf



Focusing on one factor is dangerous, especially if a true and comprehensive analysis of the numbers indicate otherwise. Such is the case for renewable fuels. While ethanol has certainly become the target, there are many causes lifting commodity prices this spring. Several independent think tanks place biofuels' contribution to the food cost increase on a global basis at somewhere between 10 and 30 percent. A study completed at University of Wisconsin by Fortenbery and Park suggests ethanol demand has increased corn prices by only 41 cents per bushel over levels that would have otherwise existed. As it is, corn prices have actually increased by $1.22 over the same period studied by the Wisconsin researchers, suggesting other factors are contributing to higher commodity prices. Exports also have increased corn prices, but the Wisconsin researchers suggest a significant effect coming from speculative trading by outside investors.

Ethanol production and use is helping keep oil and gasoline prices lower than they might be. According to Merrill Lynch commodity strategist Francisco Blanch, without biofuels, which can be refined to produce fuels much like the ones made from petroleum, oil prices would be 10 percent to 15 percent higher. Without expansion of biofuel production and use in the U.S., Brazil and elsewhere, world oil demand would increase and so would the

price. Taking the 10 percent figure as a conservative estimate and a national average gasoline price of $3.50 per gallon on the roughly 145 billion gallons of gasoline consumed in the United States every year, ethanol is saving the consumer more than $50 billion in lower fuel costs.

Summary

In summary, there is no short-term answer to this complex situation. Domestically, the spiraling cost of natural gas and crude oil are having a major impact on production costs for farmers, ranchers, and the entire food production chain. Action must be taken to reduce our reliance on foreign sources of fuel. Development of domestic oil and gas reserves, a continued commitment to biofuels and development of renewable resources must be part of the solution. On the broader front, while there are domestic ramifications, the overall food price problem is global and requires global solutions.

Countries must be discouraged from placing embargos on exports, which only result in escalating prices. Investments in agricultural research and infrastructure will play a critical role increasing agricultural production. Markets must be given time to adjust to growing demand and be allowed to stabilize.

In the short-term, food aid, agricultural assistance and market calm can help us through this difficult time. We are committed to assuring an adequate, safe and affordable food supply. AFBF will work with humanitarian groups to seek assistance for those in need. American producers will continue to provide food for the U.S. and for growing demands around the world. The situation we face today has been building over a long period -- it will not be resolved by politically expedient solutions but must be addressed in a thoughtful and comprehensive manner.

Testimony of

Governor M. Jodi Rell
State of Connecticut

Submitted to the

United States Senate
Homeland Security Committee
Regarding Federal Renewable Fuels Policy and Food Prices

May 7, 2008

Washington, DC

Introduction

Dear Senator Lieberman and Ranking Member Collins:

I thank you for the opportunity to provide this written testimony concerning the nexus between federal renewable fuels policy – specifically, the use of ethanol, most of which is currently produced using corn – and the recent spikes in staple food prices for consumers.

As you know, on May 1 I wrote President Bush and Congressional leadership on this subject, expressing my deep concern about bruising pressure Connecticut families are facing from the vise of spiraling energy prices and soaring prices for such basic foods as milk, meat, eggs, bread and cereal.

In Connecticut today a gallon of regular unleaded gasoline costs an average of $3.787. A month ago the average was $3.35; a year ago the average was $3.06. At the local grocery store, a dozen eggs costs around $3, while a gallon of milk runs about $4. A box of Kellogg's Corn Flakes costs $4.29 while a top round beef roast and chicken breasts are both priced at $4.99 a pound.

As unrelated as the cost of a gallon of gas and a gallon of milk might seem, these price increases actually have a common link: corn. The demand for ethanol – either as an oxygenate for gasoline or as the primary component in fuels such as E85 – has increased sharply in recent years. Since most ethanol is made from corn, that demand has meant there is less of the crop for use as food for people and animals.

Moreover, some farms are opting to switch from other crops to corn or alter their crop rotation schedules because of the higher price its commands. This has implications for the supply of other field crops (and, consequently, the price of those crops), for the environment (given the large amounts of fertilizer and other chemicals used in corn production) and for energy consumption (inasmuch as corn is one of the most energy-intensive crops to produce).[1]

I recognize that ethanol is an increasingly important component of the nation's efforts to decrease its dependence on foreign oil imports and to improve air quality, and I value these efforts. Indeed, in Connecticut we have incorporated ethanol, other biofuels and other renewable energy sources into our own energy policy planning, setting targets such as having all commercial transportation fuels sold in the state to contain a 20 percent mixture of alternative fuels by 2020. I have also proposed state-level incentives to develop and establish a biofuels industry in Connecticut.[2]

---

[1] See Congressional Research Service Report RL33928, *Ethanol and Biofuels: Agriculture, Infrastructure and Market Constraints Related to Expanded Production* (**hereafter "CRS Report"**), March 16, 2007.
[2] *Connecticut Energy Vision for a Cleaner, Greener State*, Gov. M. Jodi Rell, September 2006. Available at http://www.ct.gov/governorrell/lib/governorrell/energyplan.pdf.

However, the current unsupportable increases in global energy prices – especially when compounded by equally intolerable increases in food prices – strongly argue in favor of action now to relieve the economic misery of ordinary consumers.

I believe there are two actions Congress and the President can take that will have a positive effect on these dueling price spirals: **ending the current $0.54-per-gallon tariff on imported ethanol and a temporary waiver of the federal Renewable Fuels Standard (RFS).**

Neither of these actions should have significant, long-term negative effects for the environment, the nation's strategic energy goals or American farmers.

Background

Nearly half of all gasoline sold in the nation contains ethanol. In 2006 the United States consumed 5 billion gallons of biofuels (mostly ethanol) mixed with some 65 billion gallons of gasoline.[3] Ethanol production is currently subsidized in several ways including the import tariff and a $0.51-per-gallon tax credit to fuel blenders.

Virtually all (98 percent) of the ethanol manufactured in the United States is made from corn. The U.S. Department of Agriculture estimates as much as 35 percent of the crop will be diverted to ethanol production in 2008.

Demand for corn has increased as the demand for biofuels has increased – and so has the price. July corn futures on the Chicago Board of Trade were priced at $6.12 per bushel on Monday. In January, by comparison, May futures traded at $4.98¼ per bushel.

While ethanol production capacity is increasing, all but a handful of the more than 50 plants currently expanding or under construction propose to use corn as the feedstock.[4]

Production of ethanol from sources other than corn (cellulosic ethanol) in the United States is virtually zero. The U.S. Department of Energy (DOE) is supporting six demonstration projects using a variety of feedstocks such as wood, municipal solid wastes, agriculture residue such as leftover corn stalks or wheat and barley straw.

USDA estimates that corn plantings will likely be 86 million acres this year, down by 8 percent from last year's record production. However, this week USDA said only a little over a quarter of the crop has been planted due to a cool and wet spring. That compares with about 45 percent at this time last year and an average of 59 percent over the last five years. Inasmuch as delayed plantings result in significant yield declines, these statistics have real import for future corn prices.

---

[3] CRS Report, *Introduction*, page 1.
[4] Renewable Fuels Association, *Ethanol Biorefinery Locations*. Available at http://www.ethanolrfa.org/industry/locations/.

At the same time, there are warning bells about the effects of diverting more and more corn to ethanol production:

- Since corn accounts for about 60 percent of U.S. animal feeds, increased prices have resulted in increased production costs for poultry, pork and beef. Poultry and pork prices are especially subject to this effect, since dairy and beef cattle have somewhat greater flexibility in feed.[5]
- Producers are seeing increased demand for corn as feed as a result of the growing popularity of meat diets in nations such as China.[6]
- While price-sensitive importers may be able to use alternative grains, importers that are "wedded" to corn may opt to bid up prices in an attempt to divert more of the crop away from ethanol production.[7]
- The ethanol production process is itself an energy consumer, usually fueled by natural gas – a resource already in high demand, especially as a fuel for electric generating plants.

Among additional complications:

- Ethanol separates from gasoline in pipeline transportation and is not suitable on its own for pipeline transportation due to its corrosive nature.[8]
- Since most ethanol production is located in the Midwest, the product must be transported – typically by rail or truck – to areas of use, including the Northeast and West Coast. There is some question about the ability of the rail infrastructure to carry additional capacity.[9]

Finally, it is worth noting that the Energy Information Administration's *Short-Term Energy Outlook for May 2008* projects a national average retail gasoline price of $3.71 by the third quarter of this year – $0.10 above the current (already astronomical) price and an increase of a staggering *29.9 percent* from the same quarter a year earlier.

Challenge and Response

Given ethanol's central role in national energy strategy and efforts to reduce carbon monoxide (CO) and other greenhouse gases (and as an important market for American corn producers), and corn's intimate connection to a vast array of food and other products, how can policymakers effectively break the cycle of demand-driven price

---

[5] CRS Report, *Feed Markets*, page 5.
[6] International Food Policy Research Institute, *What Goes Up Must Come Down: Global Food Prices Reach New Heights*, IFPRI Forum, March 2008.
[7] CRS Report, *Exports*, page 6.
[8] *Ibid., Distribution Issues*, pages 8-9.
[9] *Ibid.*

increases without having significant negative effects on energy policy or the agriculture industry?

I believe action on two fronts will provide relief for consumers without compromising energy goals or hindering the farm economy:

- **Lift the current $0.54-per-gallon tariff on imported ethanol**
- **Waive temporarily the federal Renewable Fuel Standard nationwide**

Ethanol Imports

Only Brazil approaches the United States in its annual production of ethanol (about 5 billion gallons in 2007 versus U.S. production of about 6.5 billion gallons). The third-largest producer, the European Union, produced approximately 570 million gallons.[10]

Brazilian ethanol is produced largely from sugar.[11] Currently only a small fraction of Brazilian ethanol is imported duty-free into the United States – approximately 2 percent of the U.S. supply – under the terms of the Caribbean Basin Initiative (CBI).[12]

Under the CBI, up to 7 percent of U.S. demand *could* be supplied in this manner, although CBI reprocessing capacity is limited.

Enacted in 1980 to protect domestic producers from low-cost foreign suppliers, the tariff does not reflect current realities of ethanol demand (or, for that matter, demand for corn). Removing the tariff would not only provide an incentive for increased CBI capacity but is warranted given the projected long-term, worldwide demand for corn.

It seems unlikely that American corn producers would be significantly affected by an increase in ethanol imports, given the high demand for corn for other uses. Nor would this be a significant disincentive to investment in the domestic ethanol industry, which – with or without a temporary waiver in the RFS, as discussed below – must unquestionably continue to expand if long-term national energy goals are to be met.

Finally, imports through coastal ports could help reduce the transportation costs currently associated with ethanol use in the Northeast and West Coast – which, as noted previously, are geographically distant from the primary centers of U.S. production.

---

[10] Renewable Fuels Association, *Industry Statistics, 2007 World Fuel Ethanol Production.* Available at http://www.ethanolrfa.org/industry/statistics.

[11] It is generally cheaper and more energy-efficient to produce ethanol from sugar than from corn. However, because of the differing costs for sugarcane in the two nations, USDA has concluded that sugar-based ethanol production in the United States would be far more expensive than in Brazil.

[12] Much of the Brazilian ethanol imported under the CBI is reprocessed (i.e., dehydrated) in the CBI countries.

Temporarily Waiving the RFS

A temporary waiver of the RFS will further relieve demand pressures for corn – pressures that have driven futures prices to unprecedented levels. This would assist in reducing not only consumer prices for corn-based products but – by reducing costs for livestock and egg production and opening cropland to other products – prices for other staples as well.

A temporary waiver would not significantly detract from long-term energy sufficiency goals, given the lengthy phase-in of increases in planned ethanol and biofuel consumption. A pause in the rate of mandated consumption would also give additional time for demonstration projects such as those currently under way through the DOE to come to fruition and for the development of other potential ethanol feedstocks.

Nor would a temporary waiver cause significant short- or long-term effects to the environment, particularly inasmuch as reformulated fuels requirements would remain in place for CO non-attainment areas.

Ultimately, however, the most persuasive argument must be the competing pressures on American family budgets. The twin hammer blows of energy price increases and food price increases warrant this action.

Additional Considerations: Energy Stimulus

American families are now receiving their checks under the Economic Stimulus Act of 2008. At the time of its passage, the package appeared to be just the shot in the arm families needed. However, much has changed since the plan was approved in February.

To further assist families through this difficult time, I have asked Congress and the President to develop a second, energy-related stimulus package. Many of the families receiving checks in the coming weeks will be using the money to catch up on bills instead of stimulating the economy through consumer spending – the original objective of the program.

More and more families could benefit from a second payment to help them bridge the widening gap between income and the costs of gasoline and groceries. Consumer confidence is in a steep decline – and small wonder, given how many families wonder what difficult choice they will be forced to make tomorrow. A second stimulus payment would provide families with a glimmer of hope, helping them do more than simply keep their heads above the turbulent economic waters.

Conclusion

We must have a coherent national energy strategy – a plan that recognizes all of the competing needs and demands and positions us to meet them in the most economical, environmentally sensitive and common-sense way.

In addition, it is critical that the federal government significantly expand its investments in the development of, and experimentation with, alternative fuels and fuel crops. States have taken some steps, as has the federal government, but these efforts have not been effectively coordinated. It is becoming increasingly clear that only by joining forces and making strategic investments will we achieve our mutual goal of decreasing reliance on foreign energy sources and providing a fuel that is affordable to American families and which does not have as substantial an impact on food prices.

Our people, especially the elderly, are struggling – struggling to cope with the endless, upward spiral of energy prices, struggling to cope with the effects of an economic slump, struggling to make ends meet when the prices of basic staples have shot up by double digits even as more and more of our household budgets are consumed at the pump or burned to heat our homes.

We need help now. Congress and the President must review current policy and take effective action **on a national scale** to address these problems. To allow the current instability to continue leaves individual taxpayers and their state governments at the mercy of unimpeded market forces and will lead to further price escalation, further erosion of state and local economies and further pain for consumers everywhere.

It is a difficult challenge. But it is one that must be faced.

Thank you for the opportunity to submit this testimony.

Statement
Of
American Cotton Shippers Association
On
Disruptive Speculative Trading Activity In Cotton Futures Market
To
Committee on Homeland Security & Governmental Affairs
U.S. Senate
May 20, 2008

The American Cotton Shippers Association (ACSA) submits that excessive speculative activity in the Intercontinental Exchange (ICE) No. 2 Cotton Contract has disrupted both the physical and futures markets for cotton.

It is also our position that the Commodity Futures Trading Commission (CFTC) lacks the requisite knowledge to determine what is happening in the unregulated markets generating these trades. The CFTC does not track this activity; therefore, it lacks the trading data, the identity of the parties engaged in these unregulated trades, how much they are trading, and in what markets. Equally important, the Federal Reserve, the Treasury Department, the SEC and other U.S. government agencies lack this information.

We hope that this hearing would result in the adoption of measures similar to those we will present today that would provide the necessary transparency, reporting, and oversight, of the unregulated markets that are creating havoc in the agricultural cash and futures markets.

Interest of ACSA

ACSA, founded in 1924, is composed of primary buyers, mill service agents, merchants, shippers, and exporters of raw cotton, who are members of four federated associations located in sixteen states throughout the cotton belt:

Atlantic Cotton Association (AL, FL, GA, NC, SC, & VA)
Southern Cotton Association (AR, LA, MS, MO, & TN)
Texas Cotton Association (OK & TX)
Western Cotton Shippers Association (AZ, CA, & NM)

ACSA's member firms handle over 80% of the U.S. cotton sold in domestic and export markets. In addition, our members also handle a myriad of foreign growths of cotton, which is forward priced based on the New York futures market. Because of their involvement in the purchase, storage, sale, and shipment of cotton, ACSA members, along with their producer and mill customers, are significant users of the ICE's No. 2 Futures Contract. Therefore, they are vitally interested in a return to an orderly futures market reflecting market fundamentals that are not grossly distorted by speculative interests.

Congress Authorized Futures Trading in Agricultural Commodities for Price Discovery & Hedging

The U.S. Congress authorized contract market designations in the agricultural commodities for the purposes of trading in futures contracts primarily to:

- Hedge against price risks;
- Discover prices through vigorous competition; and
- Price commercial transactions.

The Congress acknowledged that while futures contracts offer an investment opportunity, this conduct should be subordinate in importance to the commercial uses for which the agricultural contract markets were created.

In the discussion that follows, we establish that the market fundamentals bear little relationship to the speculative activity in the ICE Number 2 Cotton Contract. As a result, commercial hedgers have exited this market, due to the fact the traditional cash to futures relationship has ceased to exist.

This situation is the result of a recent phenomena, the advent of index funds with an estimated aggregate value of $1 trillion and the participation of Over-the-Counter (OTC) traders, which take a myriad of forms. While bringing record liquidity to the agricultural contracts, these entities have turned such contracts into investment contracts, thereby defeating the purposes for which said agricultural contracts were created. The result has rendered the agricultural contracts, particularly the cotton contract, ineffective for hedging against price risks, the discovery of prices, and the actual pricing of commercial transactions. The physical markets in the agricultural commodities have been adversely impacted precluding cooperatives and merchants from offering price quotations to farmers or end users since they cannot use the contracts for hedging purposes.

The New Speculative Activity Ignores Market Fundamentals Creating Severe Strain on the Cash Trade Resulting in the Lack of Price Discovery, the Loss of a Hedging Tool, & Higher Margin Costs

Since January, the U.S. cotton industry and its supporting financial institutions have lacked confidence in the ICE Number 2 Cotton Contract as a vehicle to manage its price risks through hedging and to seek price discovery.

By early March, the open interest had reached record levels of just over 300,000 contracts or 30 million bales of cotton. About two thirds of this open interest was in the May and July contract periods, while the other third was in the December contract month. Since the U.S. produced only19 million bales in 2007, the commercial trade (producers, cooperatives, merchants, and mills) represented a much smaller portion of this volume. The commercials that held the physical cotton had sold futures to lock in their basis and carry the cotton until sold and shipped.

This basis was determined when the producer, cooperative or merchant agreed to the physical sale. It is imperative that a traditional hedger be able to hedge by locking in his basis to reduce price risk, and that the market providing the hedge represent the underlying cash market value. It is equally critical to the interest of his or her lender. Banks demand that a client's position be marked-to-market on a daily basis so that they can value the collateral held by the bank in the trader's account.

Speculative trading, at a time when not one additional bale was consumed or destroyed by weather, drove up cotton futures prices by over 50 percent in a two-week trading period in late February. On March 3rd, the price in the front month (March) reached $1.09, when two weeks previous to that it was at 72 cents. At the same time, the physical price was in the low 60 cent range. On that day, in a short time frame, the commercial trade did not have sufficient time to adjust to this irrational event, which was unrelated to the physical or cash market – a market with half of last year's 19 million bale crop still unsold – the highest level of U.S. stocks since 1966 - a market with a 50 percent U.S. and world stocks-to-use ratio given record world yields and reduced consumption due to poor economic conditions.

The commercial trade was subject to an immediate, unwarranted, and severe financial strain – a strain never realized before in the history of the U.S. cotton industry. Credit lines and lender's perceptions of client risk were tested well beyond the norm. To meet margin calls, banks would have had to value a clients' physical stocks well beyond what the market could bear. The value of the cash commodity bore no relationship to the futures or option prices. No potential buyer of the physical commodity, either a textile mill or another merchant, would pay an amount in excess of its spot or cash market value. Therefore, to satisfy its lenders, the commercial trade had to close out futures at huge losses to generate the cash to repay its loans. Some smaller merchants, who could not withstand these losses, were forced to discontinue operations. Larger merchants with more substantial balance sheets were severely impacted as well and in some cases had to cease or greatly reduce the scope of their operations. At the end of the day, over $1 billion would be posted in margin calls.

The current futures market situation precludes any form of price discovery because of the potentially high margin risks. Lacking the financial ability or willingness to hedge in the futures market, the result is that merchants and cooperatives cannot offer farmers forward prices. This situation also precludes individual farmers from using the futures market.

The private trade and the cooperatives have been forced to change their business models. We can no longer offer producers forward prices. Therefore, the producer cannot take a forward contract to his banker to secure financing. This is not only true for cotton, but for every other agricultural commodity. The banks financing producers, merchants and cooperatives no longer have confidence in the futures market. Therefore, they are reluctant or lack the capacity to provide the necessary margin funding. Like us, our

financing banks are still in shock from the massive margin calls in the first week of March.

Lacking price discovery, the U.S. cotton farmer cannot adequately make production plans. The same goes for a U.S. textile mill who cannot determine what his raw fiber costs will be in future months. Further, this situation has severely impacted foreign producers, particularly in Australia and Brazil who use the ICE Contract to price forward contracts up to two years in advance of planting.

The entry of large speculative funds and index funds into the agricultural futures contracts has clearly distorted both the futures and the physical or cash markets in agricultural commodities. There is such an abundance of cash in the hands of these funds that their impact on the agricultural markets is overwhelming and negates the primary purposes for the existence of such contract markets.

Re-examine Hedge Exemption for Index Funds Not Involved In Agricultural Markets

Lacking confidence in price discovery, the U.S. cotton industry and some of the world's leading producers are now at a virtual standstill.[1] The U.S. cotton trade has

---

[1] In normal times of abundant supply, futures will trade at full carry from the first to the second futures month. "Full carry" in this context is for the certificated stock – cotton eligible for delivery on the futures contract as distinguished from regular cotton inventory. The difference between the two is the weight and overage penalties that accrue on certificated stock as it remains under certification for extended time periods. For cotton under certification between four and twelve months, these penalties amount to 3.5 lbs of weight per bale per month. So if, for example, a trader were to take delivery of this cotton in May and re-tender the bales on July futures, he would invoice each bale in July at seven pounds less than he paid for it in May. This seven pounds amounts to just over $5 per bale at current prices (7 lbs @ .73 equals 5.11). This needs to be added to the cost of carry on regular inventory. Regular carry amounts to about $5.50 per bale per month in a Memphis warehouse (Memphis is where the bulk of the current cert stock is stored). To summarize, the cost of carrying cert stock for two months from May to July amounts to about $16.10 per bale ($5.11 penalty + two months carry @ $5.50). This amounts to 322 points at 500 pounds per bale.

Between May 1 and July 1 there will be 600,000 bales of certificated stock with an age of four months or older. This is roughly 60 percent of the 1 million bales in the cert stock. This means the weighted cost of carrying the entire cert stock from May to July is 290 points (600,000 bales @322 and 400,000 bales @ 243). In theory, then, 290 points is the maximum spread that May should trade under July, since that is sufficient discount to ensure a risk-less transaction, buying May and selling July. "Risk-less," that is, except for the cash flow risk of owning over one million bales hedged with short July futures for two months! In the event the cotton market should repeat its recent performance and spike say thirty cents per pound, the owner of the cert stock would need to come up with an additional $150 million to meet margin calls before he could liquidate his seemingly "risk-free" trade. Few if any members of the cotton trade are in position to take this cash flow risk. This was recently reflected in the 360-point spread at which May/July was trading.

The additional 70 points over the cost of carrying the position for two months reflected the trade's unwillingness (or inability) to take this cash flow risk. In normal times, merchants would have tripped over each other to lock in such a margin, yet the market has traded at this level. In fact, far from rushing to lock

successfully utilized the cotton futures contract as the foundation for its business model for over 135 years. Overnight, we have been stripped of a vital tool in which to conduct our business. We are now exposed to greater risk, which allows only the few highly financed or leveraged companies to function.

Unregulated speculation has severely limited our role of making a market for our producer and mill customers. In the future, how can producers maximize their price at the farm gate or textile mills minimize their costs at the receiving dock lacking a futures market that provides accurate price discovery?

We simply cannot function in a market with unrestrained volatility unrelated to supply-demand conditions or weather events. The ICE Number 2 Contract is no longer a rational market for price discovery and hedging – its use to the commercial trade has been minimized. It is now an investment vehicle for huge speculative funds that have created havoc in the market unimpeded by fundamentals or regulation. It is a market overrun by cash precluding convergence of cash and futures prices, hedging, and forward contracting – a market lacking an economic purpose – a market not contemplated by the Congress when it authorized futures trading of agricultural commodities.

While speculative interests are vital to the functioning of a futures contract, a balance must be struck. In that regard, the CFTC is urged to take the necessary and immediate action to bring this about and restore the commercial trade's confidence in the futures market. Therefore, **we recommend that an index fund with a hedge exemption should restrict its position in a commodity to the dollar allocation or the percentage of funds allocated to that commodity as defined in its prospectus and recorded with the CFTC. Further, any variation should be subject to speculative position limits, and that such funds should report their cash positions on a weekly basis.**

We also submit that the role of the unregulated swaps market is contributing to this situation since there is no limit to or transparency in their trading activity. It is our recommendation **that the CFTC be mandated to monitor and oversee all swaps and OTC activity by requiring the reporting of all swap and OTC contracts by market participants, and that it determine the aggregation of positions from all sources, including the exchanges, ETFs, swaps, OTC, and all other trading entities. Further, that all non-traditional hedge accounts, those not involved in the commercial enterprise of physically trading bales of cotton, be reported as a separate individual category.**

---

in this margin, merchants continue to add additional bales to the cert stock, presumably to get the cotton off the balance sheet along with the accompanying short futures. This implies extraordinary levels of risk aversion, and a failure of the market to provide accurate price discovery.

Cotton Margin Requirements Are Arbitrary & Onerous

The role of margin requirements should insure the efficient operation of a contract market by maintaining a balance of accounts between the longs and shorts and when necessary by requiring additional margin calls to effect orderly settlement in volatile markets. Most importantly, margin requirements should be fair, consistent, and facilitate the efficient functioning of a contract market. That is not always the case with cotton margin requirements.

The margin requirement in the ICE Number 2 Cotton Contract can be arbitrary, capricious, and unreasonable. The cotton contract does not always margin futures to the close of the futures contract month, as do all of the other U.S. agricultural commodity exchanges, but it has until recent weeks established margins at the synthetic level determined by the close of the options contract in that month. While the futures month may be locked at the limit there are no limits on the option's contract, therefore, in that situation the option is likely to close at a level well above the futures close. This onerous requirement limits the ability of the commercial trade to obtain the requisite financing to use the contract market, thereby precluding the use of the contract market for price discovery and hedging. We have petitioned the ICE not to return to such a practice, but it claims that its clearing members reserve the right to return to this draconian practice. In our discussions with ICE clearing members, they claim that it is the ICE, which makes that determination.

While the margins are established by the contract markets and do not require approval of the CFTC, the CFTC does have emergency authority under Section 12a(9) of the Commodity Exchange Act[2] "to direct the contract market whenever it has reason to believe that an emergency exists, to take such action as, in the Commission's judgment, is necessary to maintain or restore orderly trading in … any contract market." The current situation is such an emergency pursuant to the statutory definition as it constitutes a "major market disturbance which prevents the market from accurately reflecting the forces of supply and demand for such commodity."[3] In this case cotton. Such an emergency exists, and we urge the Congress to compel the Commission to use it emergency authority to, inter alia, **require that the ICE and its clearing members adhere to the practice of margining futures to futures settlements and options to option settlements and that only those involved in the physical handling of the agricultural commodity (cotton) be eligible for hedge margin levels.**

---

[2] 7 USC 12a(9)
[3] Id.

The Congress Must Act To Restore Historic Equilibrium To Agricultural Futures Markets, Thereby Enabling Participants To Seek Accurate Price Discovery & To Use For Risk Management Hedging Purposes

For too many years, we have heard the argument that the unregulated markets are passive. That they have no impact on the workings of the agricultural futures contract markets. That might have been true at one time, but that is not the case today. They now have found a home in the agricultural markets, and they, not the market fundamentals are controlling these markets. You cannot ignore that fact. Now they dominate and distort our markets. Accordingly, you must act or American agriculture will suffer the consequences of inaction.

We urge the Congress to take the appropriate, prompt, and necessary action that would bring transparency to the cotton contract and all the agricultural contracts, limit excessive and disruptive speculation unrelated to market fundamentals, restore price discovery, and encourage the commercial trade to utilize the contract as a hedging mechanism thereby allowing producers and textile mills to once again have access to forward contracts as risk management tools.

In doing so, we respectfully suggest that the Congress be firm in its resolve and that it ignore those who would justify this irrational imbalance in the U.S. agricultural contract markets on the grounds that the necessary oversight, reporting, and regulation of the index funds and swaps operators would drive this business offshore. That is a competition issue that should be resolved in the international marketplace. It is not the role of the Congress or the CFTC to guarantee the exchanges record trading volumes, but to assure that the agricultural contracts provide price discovery and hedging. The Congress and the CFTC's role is to protect those that Congress intended it to protect - the commercial users of the agricultural contract markets.

By taking action to restore the integrity of the agricultural contract markets the Congress would assure that the CFTC fulfills the legislative intent of its role as an independent regulatory agency to prevent "excessive speculation ... to the detriment of the producer or the consumer and the persons handling commodities and the products and byproducts thereof in interstate commerce rendering regulation imperative for the protection of such commerce and the national public interest therein."[4]

ACSA supported the establishment of the CFTC as an independent regulatory agency in 1974. It continues to support the CFTC, and it urges the Congress to provide the CFTC with the necessary mandates and resources to fulfill its statutory duty and resolve the current crisis in the agricultural contract markets.

We thank you for the opportunity to express these views on behalf of the cotton industry.

---

[4] 7 USC 5

RECOMMENDATIONS

RESTRICTIONS ON SPECULATIVE ACTIVITY OF INDEX FUNDS WITH HEDGE EXEMPTIONS

Require that an index fund with a hedge exemption restrict its position in a commodity to the dollar allocation or the percentage of funds allocated to that commodity as defined in the fund's prospectus and recorded with the CFTC. Further, any variation should be subject to speculative position limits, and that such funds should report their cash positions on a weekly basis.

REQUIRE FULL REPORTING & CFTC MONITORING OF ALL MARKET PARTICIPANTS

Recommend that the CFTC monitor and oversee all swaps and OTC activity by requiring the reporting of all swap and OTC contracts by market participants, and that the CFTC determine the aggregation of positions from all sources, including the exchanges, ETFs, swaps, OTC, and all other trading entities.

SEPARATE REPORTING CATEGORIES FOR NON-TRADITIONAL HEDGERS

Require that all non-traditional hedge accounts, those not involved in the commercial enterprise of physically trading bales of cotton, be reported as a separate individual category.

MARGIN FUTURES TO FUTURES & OPTIONS TO OPTIONS SETTLEMENTS

Require that the ICE and its clearing members adhere to the practice of margining futures to futures settlements and options to option settlements and that only those involved in the physical handling of cotton be eligible for hedge margin levels.

HEDGE MARGIN LEVELS

That only those involved in the commercial enterprise of physically trading bales of cotton, shall be eligible for hedge margin levels.

STUDY IMPACT BEFORE INCREASING SPECULATIVE POSITION LIMITS

Urge the CFTC to study the impact on price discovery and volatility, prior to any additional increases above current levels in speculative position limits in the single months or all months.

National Grain and Feed Association

1250 Eye St., N.W., Suite 1003, Washington, D.C. 20005-3922, Phone: (202) 289-0873, FAX: (202) 289-5388, Web Site: www.ngfa.org

Statement of the
National Grain and Feed Association
to the
Committee on Homeland Security and Governmental Affairs
U.S. Senate

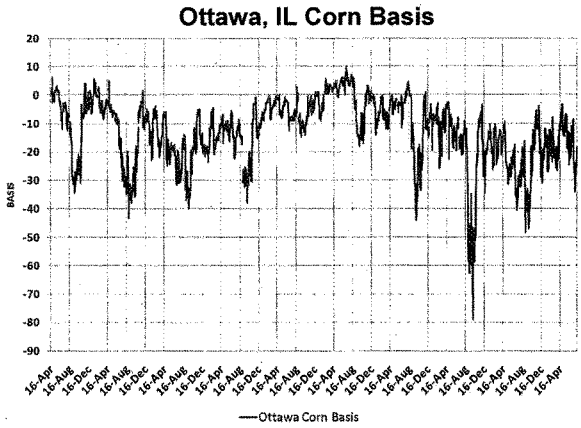
May 20, 2008

The National Grain and Feed Association (NGFA) appreciates the opportunity to submit the following statement for the record of the committee's May 20 hearing on the impacts of speculative investment capital on U.S. futures markets. The NGFA is comprised of more than 900 companies nationwide, including grain elevators, feed manufacturers, oilseed processors, flour mills, biofuels producers and marketers and many other related commercial businesses.

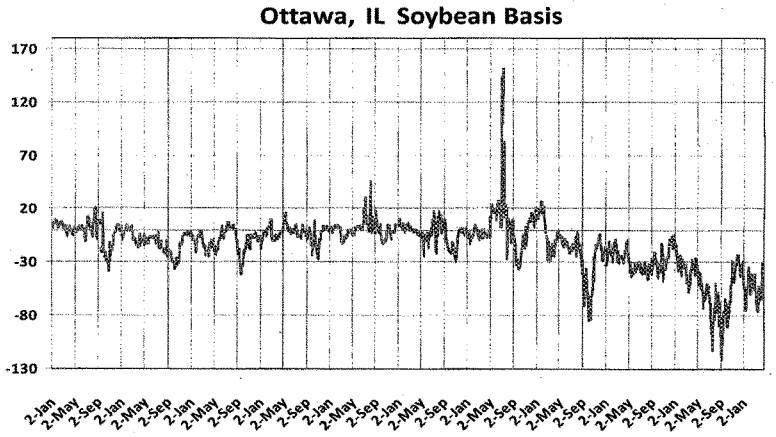
Convergence and Basis Issues

The NGFA's member firms have relied for years on U.S. agricultural futures markets to hedge their price and inventory risk, and to aid them in assisting producers to market their commodities and manage risk. As first-purchasers of grains and oilseeds from producers, these firms rely on well-functioning futures markets for price discovery and risk management. One of the bedrock fundamentals on which hedging strategies are predicated is consistent and reliable convergence between cash and futures prices during the delivery period.

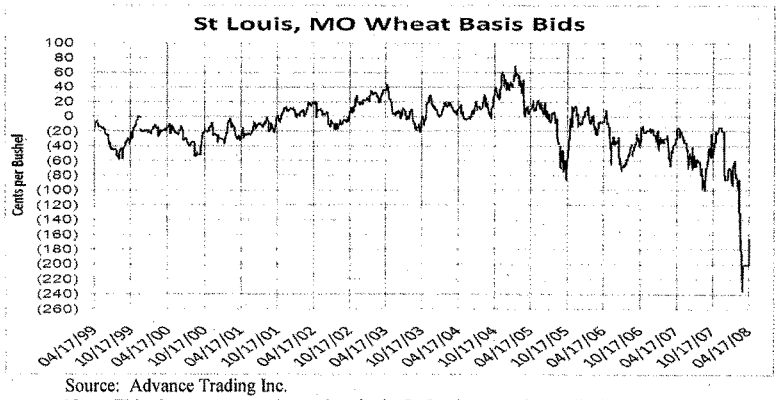
Today, that previously reliable relationship between cash and futures has deteriorated to a point where many commercial grain hedgers are questioning the effectiveness of hedging using exchange-traded futures. Genuine convergence occurs less often and only for short periods of time. The band, or range, of convergence has widened due to several factors, including: 1) higher and more volatile transportation costs; 2) demand for storage created by biofuels growth; and 3) the futures market running ahead of cash values due to the infusion of passively managed, long-only investment capital. The following charts illustrate that basis has become more volatile and "weaker" than demonstrated historically – corn, to some extent, and soybeans and wheat more dramatically – thus, convergence has deteriorated:



Source: Advance Trading Inc.



Source: Advance Trading Inc.



Source: Advance Trading Inc.
Note: This chart represents river values in the St. Louis area; wheat mills in the St. Louis area are paying higher values (e.g., +5 Chicago on one recent day) for appropriate-quality wheat.

This lack of convergence – or "divergence" as some are calling it – is evident in wider basis levels between cash and futures. Cash bids to producers at any given location and time still reflect the true value of commodities, but rapid advances in futures price levels have widened basis to levels not historically expected. This wider basis can sometimes make commodity prices appear "too cheap" at the local grain elevator.

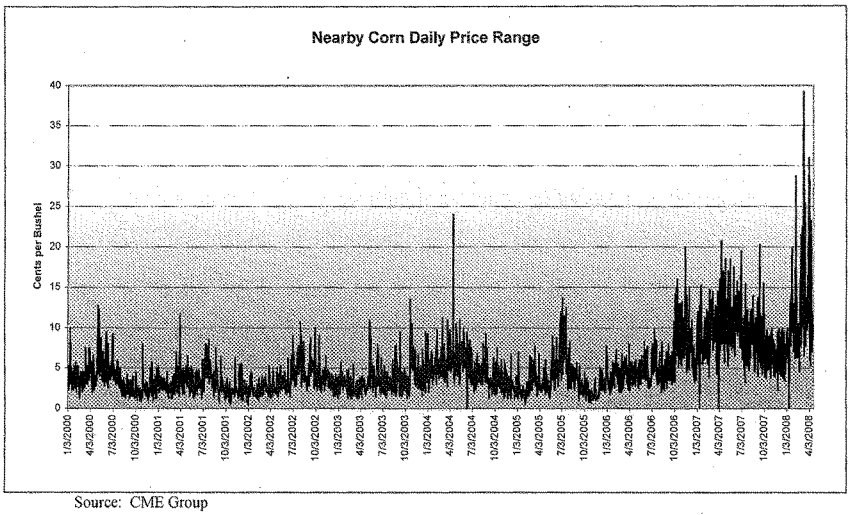
As mentioned above, many factors are at work to influence price levels and basis: transportation and fuel costs; changes in supply/demand fundamentals; carry-over inventory levels; farmer selling; storage rates; and more. Changes in any of these factors can result in significant changes to basis levels, and today we are seeing many changes occurring simultaneously. However, we believe that one new factor – the entry of large amounts of long-only, passively-managed investment capital like index and pension funds into agricultural futures markets – is causing a disruption in markets and resulting in futures prices no longer reflecting true supply/demand fundamentals.

Financial Liquidity Issues

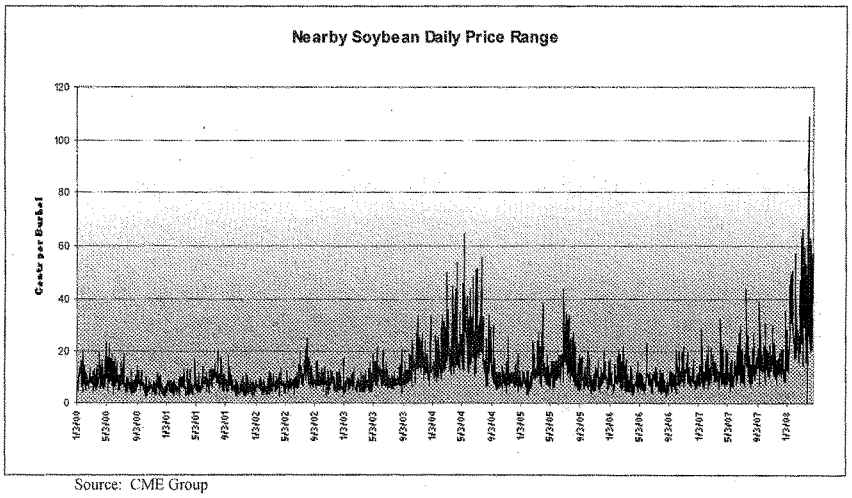
Decreased hedging efficiency due to deteriorating convergence and unpredictable basis patterns are not the only concerns for commercial grain hedgers today. As a result of significantly higher futures prices, driven in part by investment capital, elevators that purchase cash grain from farmers for deferred delivery have been hit with extremely large margin calls on their hedge accounts.

Long-only, passively-managed investment funds account for a significant share of open interest in the CBOT grains and oilseeds contracts. These passively-managed, long-only contracts are not for sale at any price for extended periods of time, resulting in elevated prices not reflective of demand, increased speculative interest in the market, increased volatility, and pressure on banking resources to fund margins.

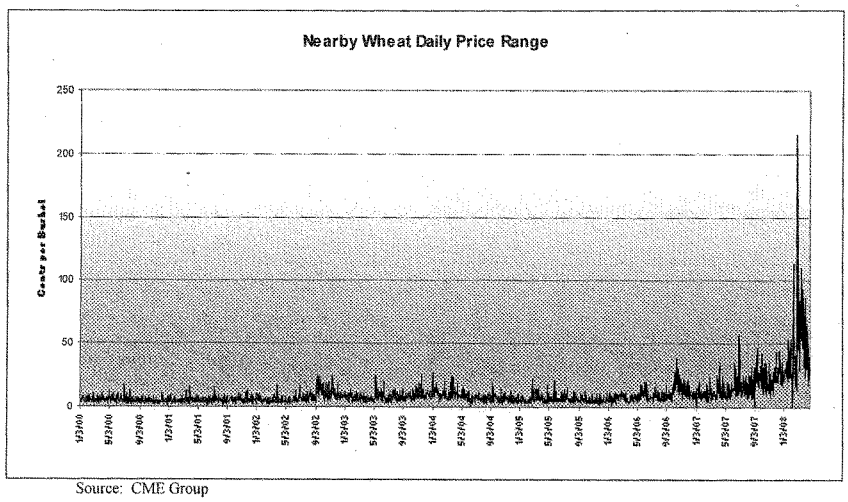
The following charts show the increased volatility for corn, soybean and wheat futures in recent months:



Source: CME Group



Source: CME Group



Source: CME Group

To finance inventory purchases and make margin calls, commercial grain hedgers' borrowing needs today are several times normal levels. Elevators have reached their borrowing limits and some lenders have reached the limit of amounts they can lend to the commercial grain sector. Additional futures price advances – due to supply/demand shocks, bad weather, or ever-larger amounts of investment capital – could lead to severe financial stress. Even today, some elevators lack the capital to finance additional hedges, so they have been forced to restrict or eliminate deferred purchase bids to producers. If the situation continues, producers who lack access to cash forward contracts they have come to expect will increasingly be frustrated when attempting to optimize their marketing opportunities at a time when cash prices are very attractive.

To sum up and quantify the impact of investment capital on agricultural futures markets, we have analyzed the Commodity Futures Trading Commission's (CFTC) Commitment of Traders (COT) report. This particular analysis uses data from the COT report dated April 8, 2008. For this analysis, we have excluded the non-commercial spread positions, which tend to overstate the open interest that is available for purchase or sale. This analysis demonstrates the significant share of open interest held by "Index" traders: 30% of net open interest in corn, 34% in soybeans, and an amazing 50% in wheat. These very large, long-only positions represent a large share of grains and oilseeds volume that is taken off the market for long periods of time and is not for sale at any price!

There is a perception that higher volume leads to increased liquidity. However, such a large share of open interest owned by passive participants actually results in <u>reduced</u> liquidity and <u>higher</u> volatility. In addition to the changes in liquidity and volatility, we believe long-only, passively-managed investment has a significant impact on futures prices and on the process of convergence.

Moratorium on Hedge Exemptions

For the reasons detailed above, the NGFA opposed proposals by the Commodity Futures Trading Commission (CFTC) late last year to increase federal speculative position limits and to create a new hedge exemption for index and pension funds. Today, we believe action by the CFTC is urgently needed to allow agricultural markets to "take a break" and adjust before additional large amounts of investment capital find their way into agricultural futures. At the CFTC's Agricultural Futures Roundtable on April 22, we shared with the Commission our belief that investment capital is having a significant impact in agricultural futures markets.

Consequently, the NGFA has petitioned the CFTC for a **moratorium on all hedge exemptions for long-only, passively-managed investment capital entering agricultural futures markets.** For the two funds already approved by CFTC for hedge exemptions, the NGFA has asked the Commission not to expand their hedge exemptions beyond levels already approved by the Commission. The NGFA also has recommended that long-only, passively-managed investment capital participate in futures on a dollar-for-dollar, unleveraged basis – that is, that a participant's positions in agricultural futures contracts should be backed by an identical amount of investor funds held in an account by the fund.

Commitments of Traders Report

Early last year, the CFTC began publication of a supplemental COT report with a new "Index" category to report investment capital. The NGFA's member companies were extremely pleased with that new category, believing that transparency in the marketplace is of benefit to all participants. In particular, the new "Index" category was helpful in assisting commercial grain hedgers to develop their risk management strategies based on supply/demand fundamentals, rather than on speculative investment capital.

We believe that today's market environment calls for a re-examination of the CoT report. While some suggest that investment capital's share of open interest in agricultural futures contracts has not increased in recent years, we are skeptical of that claim. We suspect that some activity that rightly belongs in the "Index" category could now be showing up in other CoT report categories. For that reason, **we have requested that the CFTC analyze in detail the reporting it receives from market participants to determine if all long-only investment capital is reflected in the "Index" category.** Additionally, we have asked CFTC to fully and clearly define futures market activity reported in each existing category of the report; and consider whether any additional detail/categories added to the report would provide additional clarity for market participants.

Summary

Ultimately, the solution to recent market upheaval may simply be time. In time, the market may respond to new realities. The market likely will create new ways to deploy capital in agriculture. In time, industry may expand storage, and the CME Group may implement enhancements to their contracts. Without a doubt, market participants will create new products for risk management that reflect the broad changes in the agricultural landscape – transportation, biofuels, major acreage shifts, to name a few. The NGFA will continue its work to identify additional potential responses to assist commercial grain hedgers dealing with the volatility and financial stresses of today's markets, whether they be changes to futures contracts, regulatory action or some other course.

In the shorter term, there are real disconnects and real stresses, in particular on the commercial grain hedging sector. We believe these stresses call for action along the lines outlined above that will help build a bridge to new market realities. Failing to do so could have serious consequences for all sectors of agriculture, including producers and the elevators who work with them to facilitate efficient marketing and risk management for the grain sector.

STATEMENT FOR THE RECORD
ON BEHALF OF THE
AMERICAN BENEFITS COUNCIL

IN CONNECTION WITH THE JUNE 24, 2008 HEARING OF THE
SENATE HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS COMMITTEE

July 9, 2008

In connection with the hearing held on June 24, 2008, on Ending Excessive Speculation in Commodity Markets: Legislative Options, the American Benefits Council appreciates the opportunity to provide this statement on an issue of significant importance to employer pension plan sponsors and the millions of working Americans, retirees, and their families who rely on employer-sponsored pension plans for their retirement security.

The American Benefits Council (the "Council") is a public policy organization representing principally Fortune 500 companies and other organizations that assist employers of all sizes in providing benefits to employees. Collectively, the Council's members either sponsor directly or provide services to retirement and health plans that cover more than 100 million Americans.

The effects of record food and energy prices are being felt acutely by American consumers. The Council certainly understands the Committee's desire to address this issue and to evaluate the factors behind the recent price increases as well as potential policy responses. The Council is greatly concerned, however, about the prospect of legislation that would prohibit pension plans from investing in certain types of assets.

Tens of millions of American workers and retirees rely on the voluntary employer-sponsored pension system as a critical element of their retirement security. In seeking to address the current financial challenges faced by American families, it is important that any contemplated policy changes not undermine Americans' retirement security.

The Employee Retirement Income Security Act of 1974 ("ERISA"), the primary law that regulates the investment of pension assets, imposes rigorous fiduciary responsibilities on the persons who manage pension investments, *i.e.*, plan fiduciaries. ERISA requires that a plan's fiduciary act prudently, diversify plan investments so as to minimize the risk of large losses, and act solely in the interest of the plan's participants and beneficiaries. Notably, ERISA does not generally require or prohibit specific types of investments.[1] Violation of these ERISA obligations subjects fiduciaries to a range of civil and criminal penalties.

[1] The sole area in which ERISA directly regulates pension investments is with respect to investments in employer securities. This area is unique in that there is a potential for excessive concentration of investment risk and conflicts of interest.

In order to meet these rigorous fiduciary responsibilities, it is vital that pension plans have the ability to invest in accordance with modern portfolio theory and pursue the best investment strategies available. The investment marketplace is constantly evolving and pension plans need to be able to adapt accordingly without being limited by a prohibition on, or mandate of, certain investments.

Today, private pension plans invest in a wide range of different asset classes, including U.S. and international fixed income, U.S. and international equities, private equity, emerging markets, real estate and natural resources. In addition, plan fiduciaries use a wide variety of investment tools and strategies to mitigate risk and increase returns. The Department of Labor, the federal agency with oversight responsibility for pension investments, has consistently blessed new and evolving investment strategies and asset classes, so long as the investments are prudent and for the exclusive benefit of participants and beneficiaries.[2] While commodities are not currently a particularly significant component of the assets held by pension plans, commodities can be part of a prudent, well-diversified investment portfolio as they provide a hedge against inflation and can help minimize volatility.

It should also be noted that pension plans are long-term investors rather than speculators. Plan fiduciaries pursue disciplined strategies for minimizing risk and enhancing returns so that they can fulfill the long-term retirement promises they make to employees.

Specific restrictions on certain investments, such as commodities, would limit a plan fiduciary from prudently investing, diversifying assets, and generally acting in the sole interest of the plan's participants. The Council also fears that legislation prohibiting certain pension investments could ultimately put the benefits of employees at risk. Congress has, in the past, considered legislation, often motivated by non-pension social or political goals, that would limit plans from investing in specific asset types and, similarly, legislation that would require plans to invest in certain asset types. However, Congress has consistently rejected legislation that would allow other social or political concerns, no matter how worthy, to trump the retirement security of millions of Americans and their families. The Department of Labor has even interpreted "the requirements that a fiduciary act solely in the interest of, and for the exclusive purpose of providing benefits to, participants and beneficiaries as prohibiting a fiduciary from subordinating the interests of participants and beneficiaries in their retirement income to unrelated objectives" when confronted with whether pension plans may pursue social goals when considering economically targeted investments.[3]

---

[2] *See, e.g.*, Department of Labor Information Letter to Eugene Ludwig, Comptroller of the Currency (Mar. 21, 1997) (permissibility of investing pension assets in derivatives).
[3] 29 C.F.R. § 2509.94-2.

Prohibiting the use of commodities in pension plans would make it difficult for plan fiduciaries to adequately diversify investments to hedge against market volatility and inflation and could, consequently, put at risk the retirement benefits of many of the very consumers such prohibitions are intended to help. The Council is concerned that moving forward with such restrictions would also establish a troubling precedent for the role of government in pension investment decisions. We urge the Committee to refrain from such counterproductive steps.

Thank you for your consideration of our views on these important matters.

COUNCIL OF INSTITUTIONAL INVESTORS

Suite 500 • 888 17th Street NW • Washington DC 20006 • (202) 822-0801 • Fax (202) 822-0801 • www.cii.org

June 26, 2008

The Honorable Joseph I. Lieberman
Chairman
Committee on Homeland Security and Governmental Affairs
United States Senate
340 Dirksen Senate Office Building
Washington, DC 20510

Re: Statement on Institutional Investors and Commodity Investments

Dear Mr. Chairman:

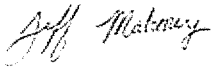
I am writing to share with you a statement that the board of directors of the Council of Institutional Investors issued on June 24, 2008, in response to recent concerns about the relationship between commodity futures trading by institutional investors and rising food and energy prices.

The Council is a nonprofit association of public, union and corporate pension funds with combined assets that exceed $3 trillion. Member funds are major long-term shareowners with a duty to protect the retirement assets of millions of American workers. The Council strives to educate its members and the public about good corporate governance, shareowner rights and related investment issues, and to advocate on our members' behalf.

The attached statement reflects the views of Council's board with respect to legislative proposals to limit the ability of pension funds to make commodity-based investments. We, however, share your concerns about the recent sustained increase in commodity prices and their consequences for individuals and the overall economy, and applaud your efforts in pursuing this important matter.

If you have any questions about the statement or if we can be of any assistance to you or your staff, please do not hesitate to contact me at jeff@cii.org or 202.261.7081.

Sincerely,



Jeff Mahoney
General Counsel

cc: The Honorable Susan M. Collins, Ranking Member, Committee on Homeland
Security and Governmental Affairs

Attachment

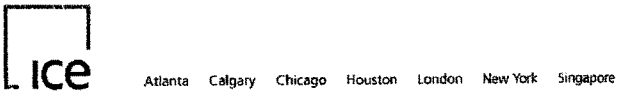
Statement on Institutional Investors and Commodity Investments

June 24, 2008 –For immediate release
The Council shares the concerns of many legislators, other policy makers and fellow Americans regarding the recent sustained increases in commodity prices and their consequences for individual consumers and the overall economy. But we are concerned that legislative proposals to limit the ability of sophisticated institutional investors to make commodity-based investments could harm millions of Americans, including U.S. workers and retirees who are the beneficiaries of pension funds, without impacting the issue of escalating commodity prices.

Consistent with their fiduciary responsibilities, some of our member funds may choose to invest in commodity-based instruments in order to diversify their investment portfolios and hedge against inflation. These investments are one of the many investment vehicles used by Council members to safeguard and professionally invest plan assets on behalf of their plan participants and beneficiaries.

We are unaware of any comprehensive or robust analysis supporting allegations that pension funds are disrupting the capital market system by investing in commodity-based securities. We encourage Congress, regulatory bodies and others to perform necessary and comprehensive analysis to fully understand the causes of commodity price increases prior to proposing or approving legislation on this very complex issue.

Certainly we applaud efforts to investigate potentially abusive market practices. However, absent data suggesting the need for market reforms, we oppose legislation that would unnecessarily limit or prohibit sophisticated investors from investing in commodity-based securities. We believe such legislation would increase the costs and the risks of pension funds to the potential detriment of fund sponsors—corporations, states, municipalities throughout the United States—as well as millions of workers, retirees and other beneficiaries supported by those funds.



July 3, 2008

The Honorable Joseph Lieberman
United States Senate
706 Hart Office Building
Washington, DC 20510

Senator Lieberman:

Thank you for the opportunity to comment on your proposed legislation. IntercontintentalExchange, Inc. (ICE) is a New York Stock Exchange listed company that was formed in 2000 to bring transparency to OTC markets by offering many-to-many electronic trading of energy commodity products. Through a series of acquisitions, ICE now operates four markets: 1) ICE Futures US, a U.S.-based, Commodity Futures Trading Commission (CFTC) regulated "designated contract market" (DCM); 2) ICE Futures Europe, a London-based "recognized investment exchange" (RIE), supervised by the UK Financial Services Authority (FSA); 3) ICE Futures Canada, a Winnipeg-based exchange, regulated by the Manitoba Securities Commission; and 4) ICE OTC, an over-the-counter (OTC) derivatives marketplace operating as an "exempt commercial market" (ECM) under the Commodity Futures Modernization Act of 2000.

Over the past two years, ICE has worked closely with members of Congress and the CFTC to enhance transparency with respect to global derivatives markets. In addition, ICE has worked to foster a better understanding of how futures markets work and the important role that they serve through sending price signals to both consumers and producers about what the future – and it is important here to stress the word ***future*** – price of energy commodities might be. All markets are fundamentally based upon what market participants believe the "future value" of an asset will be – this is true of equity markets, the housing market, and especially true of the futures markets, where hedgers and speculators come together with their unique market views and essentially predict what the future may hold based upon a consensus of market views.

Against this backdrop, we have watched with concern the recent testimony before the Committee on Homeland Security and Governmental Affairs, where a minority view seems to have developed that "excessive speculation" is a primary driver of today's oil prices. For reasons set forth below, we respectfully submit that this view is misguided, and we are gravely concerned that government intervention with efficiently operating markets will only result in market distortions, ultimately resulting in matters being made worse for Americans in the long run.

Our country has an energy problem, and it is our view that today's futures markets accurately reflect this fact and the views of a majority of the marketplace that as a country, we do not have a viable plan to address the problem. The rise in the price of oil over the past year has been driven by a number of factors. First and foremost are supply and demand fundamentals – oil is a global commodity, and we live in an age in which there has been almost insatiable demand from emerging markets such as China, India and the Middle East, combined with diminishing supply from existing sources. This has led to a market with very little in the way of a supply cushion, and which responds to supply interruption events – or the threat of such events – very quickly.

In addition, the devaluation of the dollar in world currency markets cannot be underestimated. Oil is priced in dollars, and the value of the dollar has decreased significantly over the last several years against a variety of world currencies. This trend has been exacerbated by actions that have been taken by the Federal Reserve in cutting interest rates in an effort to stimulate the economy. In recent testimony before Senate Committee on Homeland Security and Governmental Affairs, Dr. Benn Steil of the Counsel on Foreign Relations submitted testimony showing the price of oil in Euros – while the price increase was significant, it was not nearly as steep as the price of oil in dollars. Even more dramatic was the price of oil plotted against the price of gold, which showed little in the way of price inflation. We have included a copy of Dr. Steil's written testimony for your benefit.

In the end analysis, futures markets are simply reflections of what all market participants believe the ***future*** price of the underlying commodity will be, based upon all information that is being brought to the marketplace by a variety of participants. Currently, in response to the price signals being sent from efficiently operating derivatives markets, governments, businesses and consumers are adapting to this picture of the future by decreasing their consumption, working to increase production (where possible), and developing substitute energy technologies. These are all important steps that must be taken in order to adjust the fundamental drivers of pricing in the oil markets – demand for and supply of the commodity – and it is important that futures markets accurately reflect the views of the marketplace about what pricing should be. We are concerned that well intentioned attempts by government to artificially influence market price signals will only distort "the true market," resulting in a delay in taking the steps necessary to adjust supply and demand fundamentals. This has the possibility of resulting in even greater price volatility in the markets by artificially influencing the level of speculative interest, and resulting in more pain for consumers in the long run due to changes in demand and supply being delayed.

IntercontinentalExchange
2100 RiverEdge Parkway
Suite 500
Atlanta, GA 30328
phone 770 857 4700
fax 770 951 1307
online www.theice.com

With the foregoing background, we appreciate the opportunity to comment on the specific legislative proposals that you have circulated.

Closing the Swaps Loophole

The first proposal aims to close a so-called "swaps loophole," which is defined as allowing financial institutions ("swaps dealers") to be counted as "hedgers," when they offset risk, acquired through the swaps markets, on the futures markets. Futures markets serve an important mechanism to transfer risk. The "swaps loophole" proposal would severely hamper this vital risk transference mechanism. Swaps dealers serve the important function of assuming unconventional risk -- for example, a dealer will assume an airlines' jet fuel exposure through writing a tailored swap product to allow the airline to more accurately hedge its jet fuel exposure, taking into account the airline's specific needs for fuel during different times of the year, the locations out of which the airline operates, etc. The swap dealer will then hedge all or some of that risk in the futures market using standardized futures contracts (which are typically tied to one grade of commodity and one delivery point). Without the swaps dealer, the airline would have to assume an imperfect hedge for its regional jet fuel risks through direct use of the crude oil futures market, resulting in substantially greater risk exposure and the need to pass on higher prices to consumers for this increased risk. Not allowing swap dealers to hedge their risk in the futures market would only make the tailored swaps for end customers more expensive, or in extreme cases, might result in the dealer being unwilling to write a tailored OTC swap in the first place.

Turning to the specific language of the proposal, it would require the CFTC to set speculative limits on individual traders to ensure there is sufficient market liquidity. Taking position limits away from exchanges and placing them with a governmental body would result in dramatically less responsive markets as the government would be a poor substitute for the market itself in assessing optimal liquidity levels. It is important to note that increased liquidity results in tighter "bid/ask" spreads in markets, dampening volatility and making hedging cheaper for commercial users of the market. In addition, it would be problematic for the CFTC to set speculative limits because under the Administrative Procedures Act, the CFTC would have to publish for comment every speculative limit change.[1] In situations where the market is moving too fast for the CFTC, it would have the opposite effect of the stated aim of this proposal, resulting in a lack of liquidity and the associated price increases.

Second, the proposal seeks to eliminate hedge exemptions for swaps dealers. For the reasons, described above, swaps dealers serve a very important function by transferring risk on behalf of commercial users. Forcing swaps dealers to assume this

[1] 5 U.S.C. § 500 et seq. (2006)

IntercontinentalExchange
2100 RiverEdge Parkway
Suite 500
Atlanta, GA 30328
phone 770 857 4700
fax 770 951 1307
online www.theice.com

risk could have catastrophic consequences for financial institutions and commercial users alike. Finally, the proposal seeks to impose these limits on "financial institutions" that trade on foreign exchanges. Comity between governments is a cornerstone of the global financial system. Overreaching, such as attempting to enforce speculative limits on foreign futures exchanges beyond those that already exist under the mutual agreement of regulators, would destroy this comity. That is not to say that the same result cannot be achieved through regulatory dialog, however.

Imposing Aggregate Speculative Position Limits

The proposal redefines the term "excessive speculation" in the Commodity Exchange Act (Act) by clarifying that excessive speculation causes "price inflation" beyond levels justified by "market fundamentals." Excessive speculation is a very important term in the Act, forming a basis of the CFTC's regulatory authority. Tying excessive speculation to "price inflation" is very dangerous. Speculation can either be long or short as commodity markets work both ways. For example, in CFTC's action against Amaranth Advisors, LLC, the CFTC alleged that Amaranth attempted to push prices down.[2] Tying excessive speculation to price inflation would unnecessarily confuse the CFTC's authority.

In addition, the concept of "market fundamentals" is highly ambiguous. At its very essence, every futures (or equity) market transaction is speculative. In the futures market, there is a buyer for every seller, with participants speculating that the market will rise, fall, stay flat, or otherwise change over a future time horizon in a myriad of ways. It is hard to say that the CFTC would know what the "market fundamentals" are any better than the thousands of participants who participate in these markets daily, brining their own unique market views to the table and risking their capital in the process.

The proposal would also direct the CFTC to establish aggregate limits on the financial investors. Thus, financial investors would be capped, net long, on a percentage of open interest. First, by focusing on net long positions, the proposal assumes that markets only work one way. Financial investors are long and short, and artificially forcing them out of long positions would be problematic in that this may be the true direction that a rational investor in the market should take, thus creating a market distortion and sending out false price signals to consumers and producers alike. Without this valuable information coming to the market, underlying supply and demand fundamentals will take longer to adjust.

In addition, financial investors provide valuable liquidity in the long-dated contract months that stretch months and years out the price curve. A number of articles

[2]http://www.cftc.gov/stellent/groups/public/@lrenforcementactions/documents/legalpleading/enfamaranthcomplaint072507.pdf

IntercontinentalExchange
2100 RiverEdge Parkway
Suite 500
Atlanta, GA 30328
phone 770 857 4700
fax 770 951 1307
online www.theice.com

have discussed companies, such as Southwest Airlines, that hedged their fuel costs far into the future, an activity that would be very expensive or impossible if speculative liquidity in the "back months" dried up.[3]

Prohibit Investment in Commodities by Pension Funds and Certain Large Institutional Investors

The third proposal would prohibit U.S. and foreign governments and pension funds from investing in agricultural or energy commodities, except for bona fide hedging by governments. The proposal assumes that institutional investors are long and a significant percentage of the market. Both assumptions have not been adequately studied or proven, and it would be premature to draw such a conclusion at this stage.[4]

More importantly, commodity markets serve as a very important way to hedge inflationary risk that negatively impacts equity holdings in pension funds. It would be a mistake to force individuals on a fixed income to have their pensions inadequately protected against inflation through prohibiting pensions from using hedging instruments that have not been proven by economic evidence impact on price. Second, on a more macroeconomic note, institutional investors bring unique information to markets. For example, a university may have a unique view on future sources of energy. It is important for markets to reflect that type of information.

Prior Testimony Before the Committee on Homeland Security

Finally, I would like to address the prior testimony that has occurred before the Committee on Homeland Security. Based upon the testimony of most participants before the Committee on June 24th, the majority view appeared to be that passing legislation of the kind proposed above would do nothing to decrease the current price of oil. This position appears to be supported by a wealth of views in the marketplace as evidenced by the attached testimony from other Senate Hearings and news articles we file for your consideration. In contrast, the testimony of persons predicting an immediate drop in the price of oil through the passage of legislation did not appear to be supported by any rigorous economic analysis. In addition, we are concerned about the reliability of the testimony of Professor Michael Greenberger. As you are likely aware, Professor Greenberger's prior testimony before the Senate Committee on Commerce, Science and Transportation was so riddled with misstatements that the Majority and Minority Staff of Senate Permanent Subcommittee, Chaired by Senator Levin, felt compelled to issue a formal rebuttal of his testimony. We attach a copy of the same for the record.

---

[3] http://www.latimes.com/business/la-fi-southwest30-2008may30,0,2300697.story
[4] *See, e.g.* http://www.cftc.gov/newsroom/generalpressreleases/2008/pr5504-08.html

IntercontinentalExchange
2100 RiverEdge Parkway
Suite 500
Atlanta, GA 30328
phone 770 857 4700
fax 770 951 1307
online www.theice.com

In closing, we appreciate your efforts in examining the derivatives markets and the opportunity to be a part of this valuable debate. Clearly, this is a critical time in the U.S. energy and agricultural markets, and the derivatives markets must accurately reflect the underlying forces of supply and demand. However, we believe that it would ultimately be misguided for the government to artificially influence these markets, as the wrong price signals or an impaired market structure could have significant negative consequences for the country in the long run. We would be happy to address any follow-up questions that you or your staff might have regarding these issues.

Sincerely,

Jeffery Sprecher
Chairman & Chief Executive Officer
IntercontinentalExchange, Inc.

IntercontinentalExchange
2100 RiverEdge Parkway
Suite 500
Atlanta, GA 30328

phone 770 857 4700
fax 770 951 1307
online www.theice.com

Post-Hearing Questions for the Record
Submitted to Dr. Bruce A. Babcock
From Senator Thomas R. Carper

"Fuel Subsidies: Is There an Impact on Food Supply and Prices?"
May 7, 2008

1. **Economic Impact of Ethanol Subsidies:** You note in your testimony that ethanol plants will continue operating with or without federal supports so long as oil prices remain high enough to make producing ethanol profitable. So is there any economic rationale for continuing the ethanol tax credit, even at $0.45 per gallon, as proposed in the farm bill? Does the credit not drive up corn prices, thereby hurting both consumers and the livestock industry?

   Answer: Given that the EISA mandates reflect desired levels of U.S. biofuels consumption then there is no economic rationale for the blenders tax credit. The tax credit will increase corn prices when it drives ethanol production above EISA mandates.

Questions for the Record
Submitted to Dr. Bruce A. Babcock
From Senator Claire McCaskill

"Fuel Subsidies: Is There an Impact on Food Supply and Prices?"
May 7, 2008

Short term fixes such as waivers to Renewable Fuel Standards (RFS) have been proposed to reduce demand on corn—argued to reduce corn being diverted to ethanol production and freeing up acreage used currently in corn production for wheat production. The RFS requires the blending of 9.0 billion gallons of renewable fuel in transportation fuels in 2008, increasing to 36 billion gallons in 2022.

1. If requirements to last year's energy law mandating a fivefold increase in U.S. biofuel production were waived, would there be any immediate effect on the price of food? Will the waiver have a positive impact across all industries? Will bakers, such as Mr. Siegel, note an immediate decrease in flour?

   Answer: There would be little short-term impact on the price of food if the mandates were repealed. By short-term I am referring to the rest of the 2008 calendar year. However, for 2009 and 2010, a repeal of the mandate would reduce feed costs somewhat which would result in a modest reduction in the price of meat, dairy products, and eggs. The price of wheat and wheat flour would not be affected significantly.

2. Corn production in the U.S. increased by 2.6 billion bushels from 2006 to 2007: corn inputs into ethanol only increased by 0.9 billion bushels in 2007. Shouldn't we invest in technologies to bolster cellulosic conversion to further reduce our reliance on foreign oil and to mitigate the increasing demand for corn relative to ethanol production?

   Answer: Investment in research and technologies that can improve the economic feasibility of cellulosic conversion to fuel would be a sound investment. The markets are telling us that any technology that can provide a substitute for high-price gasoline would be immensely profitable. Federal sponsorship of research can make this happen more quickly.

3. Opponents argue that cellulosic conversion of organic materials is twice as costly as ethanol production. Is this a true statement and if so wouldn't it be wise to invest in technologies to reduce these costs—allowing farmers to derive profit from essentially a waste product and again, reduce our reliance on foreign oil, while protecting food commodities?

   Answer: The capital costs of building a plant capable of producing 100 million gallons of fuel from cellulosic feedstocks is estimated to be perhaps

five times as large as the capital costs of building a corn ethanol plant. But the non-feedstock variable cost of running the plants may be only 50% higher than operating a corn ethanol plant. At $130 per barrel crude oil, cellulosic biofuels production may become economically viable.

4. What are the biggest hurdles in developing commercially viable cellulosic biofuels and what is the most effective thing the federal government can do find solutions to these hurdles?

   Answer: Development of feedstock supply chains. Development of inexpensive conversion enzymes. The building of pilot plants that demonstrate alternative conversion technologies.

Marketing costs (the difference between the farm value and consumer spending for food at grocery stores and restaurants) have risen dramatically—from 59 percent in 1950, 67 percent in the 1970s to 80 percent today... In 2005, the most recent year for which data are available, direct energy costs and transportation costs accounted for roughly 8 percent of retail food costs (with labor costs make up majority of marketing costs at 38.5 percent of the marketing costs being reported in 2004).[1]

1. What has been the effect of ethanol production on retail gasoline prices across the nation?

   Answer: We estimate that elimination of the ethanol industry would increase gasoline prices by perhaps 40 to 50 cents per gallon.

2. Has ethanol production and gasoline blending had an impact on the prospects of the oil refinery industry and more importantly, the posture or strategic plans of oil producing nations?

   Answer: Expanded ethanol production has decreased the profitability of refining gasoline which has lessened the incentive to invest in new refinery capacity. In essence, expanded ethanol production has created "virtual" refinery capacity which has meant lower gasoline prices and lower demand for new refineriers.

3. Doesn't the cost of fuel factor heavily, in a compounding manner, into the services necessary to move and process food products from 'farm to arm'?

   Answer: Yes. Increased fuel prices are likely the primary reason why food prices have increased.

4. Where do inflation, the value of the dollar, and labor costs factor into the food price equation?

Answer: The value of the dollar increases foreign demand for U.S. products that we export, like food. This increases the dollar price of food. Labor costs also increase food prices. The major source of labor cost increases has been the increase in minimum wage that has caused food service employee wages to increase.

Post-Hearing Questions for the Record
Submitted to Dr. Bruce A. Babcock
From Senator Tom Coburn

"Fuel Subsidies: Is There an Impact on Food Supply and Prices?"
May 7, 2008

1. **Economic Impact of Ethanol Subsidies:** Within the world of economics, is there any doubt at this point as to whether ethanol subsidies are a significant factor in driving up the price of food?

   Answer: I do not think that there is any economist around who does not think that ethanol subsidies have caused an expansion in ethanol production which has increased the price of corn which has resulted in an increase in the price of food now and in the next two years as the full impact of increased feed costs work their way through the system.

   a. Before Congress passed the Energy Bill last year calling for Americans to use five times the amount of ethanol than is used today, do you believe that you or any other economist could have predicted that it would affect food prices so quickly?

      Answer: If by food price you mean commodity prices then no. The reason is that coincident with the announcement of the new energy bill, the value of dollar began dropping and the price of oil began increasing. Most economists probably felt as I did that the expanded ethanol mandate was already reflected in the price of corn and soybeans. But the additional pressure of a falling dollar and increased crude price was a surprise.

   b. Which federal ethanol program do you believe is having the most direct impact on food prices?

      Answer: The mandate and the tax credit work together to keep corn prices high.

2. **Ethanol Subsidies:** Do you think that the ethanol industry is healthy enough to survive without federal subsidies?

   Answer: If by survive you mean that there would be perhaps 6 billion gallons produced in 2009 and perhaps 8 billion in 2010, then yes. If you mean production equal to the mandate without subsidies then no.

   a. If ethanol was a viable alternative to gasoline, don't you think that it would be profitable to produce without any government intervention?

Answer: Yes to a limited degree. This limited degree depends on the price of gasoline which determines the price of corn that makes expansion of ethanol uneconomic.

b. Is it really fair for the government to help one industry (ethanol) survive if the cost is driving up the price of food for everyone else?

Answer: Economists are loathe to make judgments about fairness.

c. From an economic perspective, would you say that ethanol subsidies are a form of government interference with the free market?

Answer: Of course. All subsidies and taxes interfere to varying degrees with the free market.

3. **Other Federal Programs:** Are you aware of any other federal subsidy programs that are having as direct an impact on the price of food as ethanol?

Answer: Federally supported agricultural research has likely had the largest long-term impact on the price of food by lowering it. Without that research investment, food prices would be much higher than they currently are. In the short-term, federal ethanol subsidies, to the extent that they are responsible for expansion of the ethanol industry, have had the largest positive impact on the price of food.

Post-Hearing Questions for the Record
Submitted to the Reverend David Beckmann
From Senator Tom Coburn
"Fuel Subsidies: Is There an Impact on Food Supply and Prices?"
May 7, 2008

1. **Impact on the Poor:** Do you believe that federal ethanol subsidies are having a direct impact on the poor? What is that impact?

    a. Do you think it is fair that the government heavily subsidize the ethanol industry in light of the impact it is having on the poor?

A hunger crisis is gripping the world right now. The great majority of the world's poorest one billion people have suffered a serious reduction in their already miserable standard of living. Poor people in developing countries spend most of their income on a basic grain such as wheat, rice or corn. The cost of basic grains has more than doubled since 2006. This is a setback for most of the population in many countries. The poorest people are coping by shifting to one meal a day and by eating famine foods: roots, grass, mud cakes. The 36 low-income food-importing countries will spend at least $60 billion more on food imports this year than they did in 2006.

Most likely, we will be confronted by more humanitarian emergencies and political upheavals. People and governments are already hard-pressed by high food and fuel prices, so bad weather (in Ethiopia) or political malfunction (in Zimbabwe, for example) can provoke famine conditions. There have been food riots or protests in more than 30 countries. These include Afghanistan and Bangladesh, Cameroon and Somalia, Argentina and Mexico. Haiti's prime minister was dismissed in the wake of food riots. Some poor countries that have recently emerged from conflict may be pushed back into violence.

Hunger and poverty are expected to increase in the United States too, and higher food costs are one contributing factor. But food is a much smaller share of the budgets of poor people in this country. Also, most of the food Americans eat is highly processed, so the increase in the prices of corn and other basic commodities has relatively little effect on the retail cost of U.S. food. The prices of several staple foods saw double-digit inflation over the last year, including milk (10.2%), flour (20.9%), eggs (18.2%), and cheese (14%). But the prices of U.S. groceries generally were 5.8 percent higher in May 2008 than the year before.

The expansion of biofuel production is one among a number of factors that have contributed to higher prices for food, and U.S. government support for corn-based ethanol has accelerated biofuel production in this country. But many ethanol factories have already been built, and current gas prices make continued production of corn-based ethanol economic even if Congress removes federal support. We find convincing Bruce Babcock's estimate that the combined elimination of the Renewable Fuels Standard, the blenders' tax credit and the tariff on imported ethanol would result in a 13 percent reduction in the price of corn.

A 13 percent reduction in the price of corn would reduce the grocery bills of poor people in this country, but not very significantly. Also, some poor people in rural America would be negatively affected by the elimination of federal support for ethanol.

On the other hand, a 13 percent reduction in the price of corn would significantly reduce hunger and suffering in some poor countries. This strengthens the case for reconsidering federal support for corn-based ethanol.

Congress should also take other steps to address the world hunger crisis, notably a broad reform of U.S. foreign assistance. The Global Poverty Act (S. 2433) would start this process by requiring the next administration to give Congress its plan to enhance the *effectiveness* of U.S. efforts to help poor people around the world work their way out of poverty.

2. **Private Food Donations:** According to a recent article in the Christian Science Monitor private food donations are down this year by nearly 9 percent. Do you think that the price increases in food are causing people to donate less to charity?

Higher food prices may be discouraging charitable food donations in this country somewhat, but the main reason for the decline in donations is probably the slow economy. When food companies experience thinner profit margins, their food donations decrease. Many corporate food donations are for surplus, distressed, or unsellable foods – for example those that may be slightly damaged in shipping so as to be unsightly to the consumer but still edible. With shrinking profit margins, corporations are more likely to try to recoup the cost of these foods, selling them to discount food distributors rather than donating them to charity. For non-food industries, higher fuel costs combined with a weak dollar and slow growth lead corporations to trim nonessential spending, including charitable giving. Similarly, many families are struggling with economic difficulties and uncertainties, and might thus curtail their giving somewhat.

Part of the food shortage faced by food banks has been a result of a decrease in the food made available through The Emergency Food Assistance Program (TEFAP). Some of this problem has been addressed in the new farm bill, but federal provision of "bonus" commodities to food banks is likely to remain low. "Bonus" commodities are purchased at the discretion of the Secretary of Agriculture to stabilize market prices for at-risk commodities and help boost farm income. Because commodity prices have been high over the last several years, bonus commodity purchases have declined, resulting in a drastic reduction in USDA food to food banks. In FY2006, $67 million worth of bonus commodities were delivered to states for distribution through TEFAP, just 21 percent of the $319 million provided in 2002.

a. Do you anticipate that food banks will continue to run low on food in coming years, if trends continue?

With high commodity prices expected to continue USDA purchase of bonus commodities will remain low, and we do not know if private contributions to food charities will revive. If the U.S. economy remains weak, hunger and poverty will increase in U.S. communities, and food banks will continue to run low on food for the foreseeable future.

b. What are the most common foods that are donated? Does the decline in these foods correspond with the increased price for corn?

America's Second Harvest reports the food received for distribution through their national office. The 2006 annual report shows that fresh fruits and vegetables comprised the largest share of food received (18.6 percent), with soda, water, and non-alcoholic beverages (14.8 percent) and snack foods and cookies (10.3 percent) rounding out the top three categories. These three categories led in 2005 as well. The change in the price of corn has only modestly affected the retail price of U.S. groceries generally, and this data from Second Harvest does not suggest that food charities are especially reliant on the donation of corn-based foods.

c. Would it be fair to say that federal ethanol subsidies are partly responsible for less food being donated to food banks?

Based on the flow-through rate of commodity prices to the retail price of processed foods, it is unlikely that federal ethanol policies are an important cause of declining food donations in this country. The impact of high corn prices on hungry people in developing countries is a stronger argument for reconsidering federal support for corn-based ethanol.

Post-Hearing Questions for the Record
Submitted to Dr. Mark W. Rosegrant
From Senator Thomas R. Carper

"Fuel Subsidies: Is There an Impact on Food Supply and Prices?"
May 7, 2008

1. **Cellulosic Ethanol and Food Security:** Biofuels have received a lot of bad press for contributing to global forest loss, requiring more fossil fuel inputs than they displace, and for driving up food prices. But have you looked at the potential for advanced biofuels, such as cellulosic ethanol or even algae, to provide a fuel that does not weaken food security? In Delaware, DuPont is working on a new biofuel called biobutanol, which has much higher energy content than conventional ethanol. Are there policy tools we should consider to more rapidly commercialize these technologies?

Response:

Much of the criticism of current biofuels is focused on the use of corn grain to produce ethanol. Most ethanol production in place today in the US is based on breaking down corn starch to sugar and fermenting the sugar to produce ethanol. The only other country producing significant amounts of biofuel is Brazil which uses sugarcane as the starting material to produce ethanol. Somewhat more energy (1.3 times) is captured in the resulting ethanol than is used to produce the corn and make the fuel. This ratio for sugarcane is much more favorable (around 8). The US excels in producing very high yields of corn. In order to produce these yields, high levels of nitrogen fertilizer are required; fertilizer production is highly energy intensive. In addition, corn grain is a key component of the food chain with the majority of the corn crop going into livestock feed and significant portions going to make high fructose corn syrup and other food components. Consequently, using significant quantities of corn grain to make ethanol has impacts on corn and food prices. Production of ethanol from corn grain has the advantage of using existing technology which is cost competitive at current oil prices.

In addition to making fuel, either ethanol or more advanced fuels such as butanol from starch, in the case of corn, or sugar in the case of sugarcane, it is also possible to use biomass as the basis for fuel production. Most of the earth's biomass is made up of cellulose and other complex polymers of sugars. Wood and agricultural residues (stalks and leaves) are primarily composed of cellulose and hemicellulose. Additionally a number of dedicated energy crops such as switchgrass, poplar, Miscanthus and many other new crops are currently under development. There is considerable promise embodied in second- and third-generation biofuels technologies based on the use of these cellulosic materials. At the present time, several technical obstacles must be overcome to make cellulosic biofuels economically viable. Methods for growing dedicated energy crops at high levels of productivity will require improvement of these species. This improvement can be accomplished through traditional plant breeding and biotechnology. Methods of harvesting biomass will also be required. Most importantly, methods for processing biomass by breaking down

cellulosic material constitute a technical hurdle for using these materials for fuel production. Cellulose and hemicellulose are very difficult to breakdown into simpler compounds for use in fuel production; however, there has been considerable progress in both industrial processes and in using biological approaches for processing. Enzymes produced by microorganisms and modified for specific purposes can improve the feasibility and cost profile of fuel production.

While it is difficult to quantify the uncertainties surrounding the efficiency, distribution and configuration of biomass feedstocks within our quantitative scenario framework it is possible to comment of some of the activities in this area. There is a great deal of research activity devoted to the development of biofuels technology. Advances in biology such as genome sequencing, protein engineering and bioinformatics form a rapidly advancing platform for the development of biological approaches to fuel production. Biotechnology application to biofuels production is an active research area in the public and private sectors. Improvements in crop productivity, crop suitability and biofuels processing are all within the realm of proven biotechnological approaches. Biotechnology can be used to improve the crop to make it more productive or more suitable to biofuels use. Biotechnology can also be applied to the microbes involved in processing biomass into biofuels.

As you mention in your question, DuPont and BP have formed an alliance to develop methods of producing butanol, a compound with significant advantages over ethanol as a fuel. DuPont has also formed an alliance with Genencor a maker of enzymes for processing. This is an excellent example of the considerable private investment in the biofuels area and the breadth of the technical challenge. Many companies are focusing on development of improved biomass crops including Ceres Biotechnology Inc., Mendel Biotechnology Inc. (in partnership with Monsanto Co.) and Edenspace Systems Corp. The major hurdle for the development of a cellulosic biomass fuel industry is the high cost of processing biomass. The US DOE has recently provided support to private companies building pilot plants that produce ethanol from crop cellulose. Commercially successful biofuels plants that use biomass as a starting material are estimated to be at least 5 years in the future and commercial success is not ensured. The US DOE is providing more than a billion dollars in funding for lignocellulose ethanol projects for biofuels in 2007. In 2007, BP, University of California at Berkeley, Lawrence Berkeley National Laboratories and the University of Illinois announced the formation of a US$500 million biofuels initiative, most of which will be focused on applying biotechnology to crops and processing.

In the longer term, beyond 5 years, it is likely that engineered microorganisms will produce fuels such as butanol or ethanol. Algal systems can be used to develop microorganisms that produce hydrocarbons from photosynthesis. Modified or new organisms produced through synthetic biology can be made to excrete cellulases and preferentially produce butanol by over expressing the genes involved in butanol production. Additions, deletions and changes in large number of genes can result in organisms that can perform a number of new functions. Use of an easily engineered organism such as *E. coli* may result in a synthetic organism that could take biomass to hydrocarbon. A study on the feasibility of microorganisms for energy production found that "microbes present a great opportunity for energy science since they are simpler than plants, have smaller genomes and proteomes and are easier to

manipulate and culture" and microorganisms represent "enormous biodiversity" and a "broad palette of starting points for engineering" (Brenner et al. 2006).

Several policy options could further encourage the development of a cellulosic biofuel capacity. Policies such as subsidies, tariffs, and blending mandates should not be used to encourage the use of food crops such as corn for fuel. Since the eventual success of cellulosic biofuels depends on research progress in the areas of crop development and usefulness for biofuels, biomass processing and eventually synthetic biology continued investment in research related to biofuels such as that funded by DOE is essential. Biotechnology can increase the productivity of crops and with appropriate regulatory and biosafety regimes should be encouraged to solve the problems related to increasing crop yields. Use of biomass, from crop residues and dedicated energy crops, to make biofuels should be encouraged particularly by solving technical problems related to the economical use of these materials. Low public funding of crop improvement research has limited crop productivity. Increased public funding and policies that encourage private funding of crop improvement including through the use of biotechnology should be encouraged. Exploration of land use incentives to encourage farmers to use marginal lands for biomass production by growing perennial dedicated energy crops could serve energy and environmental needs. Effective farming systems for growing biomass crops should be in place before the advent of large scale demands for biomass. Additional USDA initiative could address the development of these systems.

Brenner, M. P., Bildsten, L., Dyson, F., Fortson, N., Garwin, R., Grober, R., Hemley, R., Hwa, T., Joyce, G., Katz, J., Koonin, S. 2006 Engineering microorganisms for energy production USDOE Washington DC Report JSR-05-300

---

2. **Oil prices and Food Security:** I have read that producing ethanol is highly energy intensive, requiring large amounts of fossil fuels to till the land and harvest corn. Have you looked at the extent to which increasing oil and natural gas prices are driving up corn and other commodity prices? Do you know the ratio of inputs of coal:oil:natural gas?

Response:

The cost of energy has important impacts on commodity prices. The major impacts of energy cost in agriculture are through fertilizer use (and makes up 70-90% of the total cost of producing nitrogen fertilizers), farm machinery and transportation and irrigation. Rising energy prices are a major factor affecting food production and food prices.

As a study from the USDA Economic Research Service notes (see http://www.ers.usda.gov/AmberWaves/April06/Features/Energy.htm), however, those crops which have the highest per acre energy costs do not necessarily have

energy inputs taking the largest share of their operating costs. For example, cotton - which has one of the highest per acre energy costs among field crops ($64/acre) - only has one-fifth of its operating costs going towards energy inputs, which is comparable to soybeans, which has a per acre energy input costs of $18/acre. The distribution of energy costs in agriculture, for the US, suggests that those areas which rely most on irrigation are hit particularly hard by increases in energy prices - such as those producers of corn and cotton in the west. Corn and cotton producers have fertilizers as a large share of their costs, and have been impacted by increases in the prices of fertilizer products, as well. Over time, though, the energy intensity of agricultural production in the US has been steadily declining, due to increases in efficiency, as well as changes in cropping patterns. Opportunities for more effective management of fertilizer usage exist. Precision agriculture based on detailed understanding of individual farmers fields and custom application of agricultural chemicals can reduce fertilizer application without effecting yields. Seventy five percent of water withdrawals are for agriculture. Rising prices for water and energy for pumping water have impacts on farmer's profitability. Technologies for more efficient use of irrigation water exist and will be encouraged if prices increase. Continued upward pressure on energy prices and the prices of those products derived from energy-intensive inputs seem likely to increase in the current environment.

---

3. **Ethanol and Land Conversion:** According to the agricultural research firm Advanced Economic Solutions, the number of corn acres increased by 20 percent in 2007 due to the ethanol surge. From a sustainability perspective, can we continue on a course of planting corn at the expense of other crops? Do you know how much of the arable land not currently harvested for corn could support corn crops? Is there enough land to even produce 15 billion gallons of ethanol without cutting into Conservation Reserve Program land?

Response:

The increase in corn acres in 2007 came as a result of increased planting of corn at the expense of soybeans and cotton, as well as some expansion on to new land. Much of the farmland in the US that is suitable to growing corn and soybeans is already in production. Corn prices in excess of $7 per bushel this year have large impacts on farmer's decision making. More farmers are producing corn following corn without the traditional rotation with soybeans. However, expensive corn also has implications for the profitability of ethanol with some companies deciding not to produce to their full capacity. Meeting politically mandated production levels of ethanol may not be attractive if corn prices remain at historic highs. Alternatively, significant imports from countries that can produce ethanol more efficiently (such as sugarcane-based ethanol from Brazil) could play a role in our meeting the ethanol goals. This would require reducing or eliminating the tariff on ethanol imported into the US.

Land dedicated to corn production will likely continue an upward trend by both displacing other crops and expanding current agricultural lands into both new and former (eg, CRP) agricultural lands. However, prices of other commodities have risen dramatically in the past year and corn plantings are down from 2007 while other crops

such as soybean and wheat have increased. So the total displacement of other crops by corn will not occur, given the market impacts that would inevitably manifest themselves in the form of higher prices. The wet spring and summer of 2008 could have a serious impact on the crop size this year as farmers have not been able to plant all of their acreages. It is unlikely that tremendous increases in area are likely to be the main driver of production increases for either corn or other crops, in the future, within the US. The most important source of production growth to meet demands for producing ethanol will be from increasing corn yields. Since US corn production is already highly intensive it is unlikely that more energy-intensive production methods or inputs will be the source of improved yields. US corn yield has improved at a rate of about 1.8 bu/ac/yr since the introduction of hybrid corn in the 1920's. Continued improvement of corn hybrids through traditional breeding and biotechnology should continue to improve yields at this rate or perhaps more rapidly as important traits such as drought tolerance and nitrogen use efficiency are introduced in the next 5-10 years.

Post-Hearing Questions for the Record
Submitted to Jeffrey H. Harris
From Senator Susan M. Collins

"Financial Speculation in Commodity Markets: Are Institutional Investors and Hedge Funds Contributing to Food and Energy Price Inflation?"
May 20, 2008

1. Mr. Harris, Mr. Buis equates recent rapid changes in cotton prices to how natural gas prices changed when Amaranth was suspected of manipulating markets. As you know, our Permanent Subcommittee on Investigations concluded that before its collapse in 2006, Amaranth's trading on unregulated, electronic exchanges had put pressure on market prices and cause great inconvenience to business and residential natural-gas users. Can your current surveillance system and models detect manipulation similar to what Amaranth appears to have committed?

It is difficult to draw parallels or comparisons between recent changes in cotton prices to how natural gas prices changed in the Amaranth situation because cotton does not currently trade on any Exempt Commercial Market (ECM) – it only trades on a fully regulated Designated Contract Market (DCM). Therefore, positions in cotton cannot be moved to less regulated ECMs to escape detection, as was the case with Amaranth. The Amaranth situation involved natural gas contracts that trade on a DCM (the New York Mercantile Exchange, or "NYMEX"), and also trade on the ECM InterContinental Exchange of Atlanta (ICE).

Thus, cotton does not present the surveillance issue that was a significant aspect of the Amaranth case. As the Permanent Subcommittee on Investigations and the CFTC noted, Amaranth had very large positions in natural gas futures contracts on NYMEX. The CFTC approved NYMEX as a DCM, a fully regulated futures exchange under the Commodity Exchange Act. NYMEX has self-regulatory obligations as a DCM, including the prevention of manipulation. In the exercise of its self-regulatory obligations, NYMEX ordered Amaranth to reduce the size of its natural gas position. Amaranth defeated the intent of NYMEX's order by moving its positions to the ECM, ICE, where they were not seen by either NYMEX or CFTC market surveillance staff.

While Amaranth did escape CFTC surveillance on those NYMEX positions that it moved to ICE, it did not escape the CFTC's enforcement authority. On July 25, 2007, the CFTC filed a complaint in US District Court alleging that Amaranth and its principal natural gas trader intentionally and unlawfully attempted to manipulate the price of natural gas futures contracts. This case is currently in litigation – the press release announcing the enforcement action can be found here:

http://www.cftc.gov/newsroom/enforcementpressreleases/2007/pr5359-07.html

Congress subsequently has addressed the surveillance issue relating to lightly regulated ECMs in the recent Farm Bill passed by Congress earlier this year. Under prior law, ECMs were not subject to full CFTC regulatory authority and were largely outside the CFTC's market

surveillance system. The Farm Bill included amendments to provide the CFTC with essential oversight over contracts trading on ECMs that meet specified criteria. The new legislation outlines criteria for when an ECM contract should be considered a significant price discovery contract (SPDC) and gives the CFTC the authority (in regard to SPDCs) to 1) require large trader position reporting; 2) require an ECM to adopt position limits or accountability levels; 3) require an ECM to exercise self-regulatory responsibility in order to prevent manipulation (among other things); and 4) exercise emergency authority, including the ability to order traders with problematic positions to liquidate those positions.

In the ICE natural gas contract that Amaranth traded, CFTC has issued a special call to ICE which ensures that the CFTC receives daily large trader position reporting, including data on all trades in the expiring future on its last two days of trading. As part of our implementation of the ECM provisions of the Farm Bill, the CFTC has continued to work with ICE to improve the quality of their position reporting.

2. Mr. Harris, a great many people are concerned or even convinced that active manipulation is driving food and energy prices upward. Mr. Buis pointed out that your Commission's definition of manipulation involves a trader "*consciously*" distorting prices. But I'm thinking of the arguments that the recent, large volume of trades from institutional investors like hedge funds could be *artificially* driving up prices. Are your current surveillance system and models able to detect this type of potential price distortion, even if it is inadvertent?

The Division of Market Oversight's Market Surveillance Section operates a comprehensive and systematic program to detect and prevent price manipulation and market disruption. Surveillance economists, who are specialists in their assigned markets, monitor their commodities on a daily basis. They receive information on price activity and price relationships, cash prices, large trader positions and market composition, individual-transaction data, supply and demand factors (including deliverable supply for the futures contract), the progress of contract expirations, and market news and developments. The entire range of data is reviewed as a totality to monitor the current market situation and the potential for problems to arise. The economists analyze the positions and daily trading of individual large traders (both commercial and non-commercial), as well as groups or types of participants in conjunction with other market factors, especially price movements.

In carrying out these duties, Market Surveillance staff monitors for aberrant contract prices, such as the ones that you describe, for indications of potential market problems. Irregular prices are detected by evaluating contract prices in light of key price relationships and relevant supply and demand conditions. For example, in a physically-delivered contract, staff will focus on whether the futures price reflects the cash market value of the deliverable commodity and whether the price spread between the expiring future and the next delivery month reflects underlying supply and demand conditions in the cash market. Likewise, with cash-settled contracts nearing expiration, staff is particularly alert to whether the underlying cash price is moving in a manner consistent with supply and demand factors and with other comparable cash prices, which are not used in the cash-settlement process.

The CFTC surveillance staff also monitors compliance with CFTC and exchange speculative limits. These rules help prevent traders from accumulating concentrated positions that could disrupt a market. The market surveillance staff reviews positions daily for potential violations and also monitors hedgers' compliance with their exemption levels.

The current market environment has brought concern about the role that institutional traders, such as hedge funds and index traders, play in the futures markets. The proper and efficient functioning of the futures markets requires both speculators and hedgers. While certain targeted controls on speculation are appropriate, and are being monitored and enforced, speculators as a class provide the market liquidity to allow hedgers to manage various commercial risks. Nevertheless, the CFTC is concerned that the level of participation by some classes of traders may be adversely affecting market functions even if there are not specific concerns about manipulation. The CFTC's Office of Chief Economist has been examining the markets and the role that speculators play in them. The staff studied the relationship between futures prices and the positions of managed money traders (MMTs), commonly known as hedge funds, for the natural gas and crude oil futures markets. The staff also examined the relationship between the positions of large speculators such as hedge funds and positions of other categories of traders (*e.g.*, floor traders, commercial merchants, manufacturers, and swap dealers for the same markets.

The study found that when new information comes to the market and creates some price movement, it is the commercial traders (such as oil companies, utilities, airlines) who react to it first. When commercial traders react to changes in market fundamentals by buying/selling/changing production patterns, they create hedges by entering the futures markets to lay off their price risk. The commercial traders need other traders to take the other side of their trades – that is where the speculators, both large and small, play a role. The price changes that prompt large hedgers to alter their positions in the very short run eventually ripple through to large speculator participants who will change their positions in response. The hedgers need market liquidity to establish or offset their positions in an efficient and timely manner for effective risk management. It is the speculators that provide this liquidity.

More recently, the attention on new market participants has focused on the index funds and whether they are causing market moves, either by trading directly in the futures markets or indirectly as customers of swaps dealers. As noted in the response to question 3, the CFTC is using its existing Special Call authority to require traders in the energy and agricultural markets to provide the agency with monthly reports of their index trading to help the CFTC further identify the amount and impact of this type of trading in the markets.

Finally, in a broader, over-all look at the markets, the CFTC announced the formation of a CFTC-led interagency task force (ITF) on June 11 to evaluate developments in commodity markets. The task force – which includes staff representatives from the CFTC, Federal Reserve, Department of the Treasury, Securities and Exchange Commission, Department of Energy, and Department of Agriculture, the Federal Trade Commission – is examining investor practices, fundamental supply and demand factors, and the role of speculators and index traders in the commodity markets. It is intended to bring together the best and brightest minds in government

to aid public and regulatory understanding of the forces that are affecting the functioning of these markets.

On July 22, 2008, the ITF released a staff report offering a preliminary assessment of fundamental and market factors affecting the crude oil market. The ITF's *Interim Report on Crude Oil* studied fundamental supply and demand factors and the roles of various market participants. It found that fundamental supply and demand factors provide the best explanation for the recent crude oil price increases.

3. Mr. Harris, given the large change described by all the witnesses in the portfolio of participants in futures markets in recent years, does the CFTC believe it needs to change the type of data it collects about markets and the way it analysis the data, and if so, would that require any legislative changes?

On May 29, 2008, the CFTC announced several initiatives to gather additional information about the energy futures markets, including information from swaps dealers. The CFTC is using its existing Special Call authority to require traders in the energy and agriculture markets to provide the agency with monthly reports of their index trading to help the CFTC further identify the amount and impact of this type of trading in the markets. In addition, the CFTC is developing a proposal to routinely require more detailed information from index traders and swaps dealers in the futures markets, and review whether classification of these types of traders can be improved. Lastly, the CFTC will review the trading practices of index traders in the futures markets to ensure that this type of trading activity is not adversely impacting the price discovery process, and to determine whether different practices should be employed. After analyzing this data, the CFTC will provide a report to Congress by September 15 about commodity index trading in the futures markets and recommendations for improved practices and controls should they be required.

4. Some in the Senate (Democrat's energy package) have proposed increasing the margin requirement for trading on futures markets. Do you support or oppose this proposal, and why?

As CFTC Acting Chairman Walt Lukken has testified several times in the past few months, margin in the futures markets is designed and used to ensure the financial integrity of the entire system. In the futures markets, clearinghouses set margin to cover any 1-day move and to ensure that the default of any trader will not ripple through the system, taking down the clearinghouse. It has been incredibly effective in ensuring the integrity of the clearinghouses and overall financial system for the 150 years that margin has been used in the futures industry. I think raising margin to try to impact prices would not be effective and in fact could be detrimental – as it could reduce liquidity in the markets (thereby increasing volatility), or drive business overseas or into unregulated markets.

Post-Hearing Questions for the Record
Submitted to Michael W. Masters
From Senator Susan M. Collins

"Financial Speculation in Commodity Markets: Are Institutional Investors and Hedge Funds Contributing to Food and Energy Price Inflation?"
May 20, 2008

1. Some in the Senate (Democrat's energy package) have proposed increasing the margin requirement for trading on futures markets. Do you support or oppose this proposal, and why?

I support the spirit with which this proposal was introduced, namely the desire to reduce excessive speculation in the commodities futures markets but I believe that there are more effective ways to do that. Raising margin requirements will result in the reduction of speculation but it will hurt small and mid-sized traders much more than it will hurt large swaps dealers and hedge funds with easy access to credit. I believe the better solution is to impose reasonable and rigid speculative position limits that apply across all commodities traded in all markets. That way you are specifically targeting the large traders (the ones outside of position limits) who are the ones really driving prices up while leaving the small and mid-sized speculators to continue to provide liquidity to the marketplace. I expand upon these suggestions in detail in my subsequent June 24th testimony.

Post-Hearing Questions for the Record
Submitted to Thomas J. Erickson
From Senator Susan M. Collins

"Financial Speculation in Commodity Markets: Are Institutional Investors and Hedge Funds Contributing to Food and Energy Price Inflation?"
May 20, 2008

1. **Mr. Erickson, you say there is an important distinction to be made for reporting and other regulatory requirements between hedge funds and index funds. Could you elaborate?**

   CMC views the investment activity of institutional investors, hedge funds, and index funds as legitimate financial hedging. However, we believe, there is a distinction between investment that is passive in nature and not responsive to price levels and "alpha" or "enhanced return" trading by some index and hedge funds.

   Typically index funds and institutional investors engage in passive investments. They take a position and hold it until a determined time. They do not change their position based on market movements. Hedge funds tend to be more responsive to market signals and act as a traditional speculator. As such, hedge funds are subject to speculative limits which we believe is appropriate.

   Alpha trading, which is an investment strategy that some hedge funds and index funds engage in, is price-responsive and not passively managed. CMC believes this kind of investment is speculative and should be regulated as such by the Commodity Futures Trading Commission (CFTC).

2. **Mr. Erickson, you say that even if financially driven speculation does affect day-to-day pricing in the futures markets, "it is powerless in the face of larger, fundamental forces"? Is that a realistic description of events, considering the size and sophistication of some of these institutions?**

   With the evidence we have today, we believe that it is a realistic description. In the last decade, futures markets, especially in the enumerated agricultural commodities, have grown immensely because of the relevance of their products to the commercial hedging, financial hedging, and general international and domestic trading communities – including hedge funds, index funds, and institutional investors. This increase in volume boosts liquidity, aids in price discovery, and enhances market efficiency.

   It also means that our futures markets today reflect global economics and trends – not speculative buying power. The depth of these markets means that speculative activity may influence day-to-day prices, but it is powerless in the face of larger, fundamental forces. As we have seen this month, if prices begin to retreat, speculative activity follows that retreat. It did not cause it.

3. **Some in the Senate (Democrat's energy package) have proposed increasing the margin requirement for trading on futures markets. Do you support or oppose this proposal, and why?**

   CMC believes that margin requirements should be set by exchange-owned or independent clearinghouses. CMC shares the concerns of many lawmakers about the impact escalating commodity prices will have on all Americans. It appears the intent of such proposals is to lower prices; however, we believe that increased margin requirements could have the opposite effect. It

could force market participants off-exchange and into less transparent markets.

A margin payment, also called a performance bond, is the amount of money or collateral deposited by either a customer with a broker, a broker with a clearing member, or a clearing member with a clearing organization. A margin payment does not serve as a partial payment on a purchase, but rather serves to manage counter-party risk and ensure the financial integrity of the markets. Raising margin requirements will not reduce volatility or manage prices. It will increase the cost of futures transactions and potentially push liquidity from the regulated exchange marketplace.

In the current system, clearinghouses set margin requirements. They are responsible for the financial integrity of their clearing firms and customers, and preservation of the exchange's reputation. They know their markets, firms and customers, and they interact with and monitor each market minute-to-minute.

With decades of experience, they have great expertise to assess market risk, firm risk posed to the clearing house relative to each firm's financial resources, and total risk underwritten by the mutual risk pool of the clearing house itself. They also developed and utilize highly sophisticated risk assessment capabilities and software specifically designed for real-time risk evaluation. These systems have been tested by markets even more stressful than what we are currently experience and they have withstood those tests without failure.

The CFTC audits clearinghouses regularly to assess the health and sufficiency of these capabilities and CMC is confident in the ability of CFTC professional staff to monitor and evaluate trading in all commodity markets.

For our markets to operate effectively, margin levels must be set with care and appropriate understanding of consequences. It would be easy to impose high margins with the intent of dealing with a specific risk or problem, and unwittingly trigger the negative consequence of diminished liquidity and participation. Loss of liquidity can easily exacerbate exactly the risk being targeted with high margins. The best decisions about margin levels are made on the spot by people closest to the situation.

Post-Hearing Questions for the Record
Submitted to Benn Steil, Ph.D.
From Senator Susan M. Collins

"Financial Speculation in Commodity Markets: Are Institutional Investors and Hedge Funds Contributing to Food and Energy Price Inflation?"
May 20, 2008

1. Some in the Senate (Democrat's energy package) have proposed increasing the margin requirement for trading on futures markets. Do you support or oppose this proposal, and why?

The primary purpose of futures exchange margin requirements is to protect the clearinghouse against the possibility that a client firm will not be able to cover its trading losses. Congress is now debating increasing margin requirements for unrelated purposes – in particular, to drive up the cost of futures trading, with the aim of discouraging a rise in futures prices. The only certain effect of this action, however, will be to discourage both buying and selling of futures on the targeted venues, and to encourage trading on alternative venues. There is no credible evidence that it will affect the level of futures prices. I do not, therefore, support raising margin requirements as a means of trying to reduce commodities prices. It can only be expected to reduce market liquidity, and therefore to raise the cost of hedging price risk, or to push trading outside the CFTC's jurisdiction.

Benn Steil

Post-Hearing Questions for the Record
Submitted to Tom Buis
From Senator Susan M. Collins

"Financial Speculation in Commodity Markets: Are Institutional Investors and Hedge Funds Contributing to Food and Energy Price Inflation?"
May 20, 2008

1. ***Some in the Senate (Democrat's energy package) have proposed increasing the margin requirement for trading on futures markets. Do you support or oppose this proposal, and why?***

NFU would not support increasing margin requirements for commercial users of the futures market. However, for those speculators who are disrupting the futures market and not taking physical control of commodities, increasing the margin requirements may tame the rampant and unregulated speculation currently experienced in both the energy and commodities markets.

While significant attention has been placed on the impact that speculation is having on oil and agricultural commodity prices, what is of more significant concern to American agriculture is ensuring a properly functioning market that provides real price discovery and the ability to manage risk. Since early in 2008 both of these functions have failed.

As commodity prices inexplicably increased, many farmers were unable to lock in the higher prices through hedge contracts because of skyrocketing margin calls. As margin calls increased, local cooperatives and private grain elevators could not access enough credit to pay the margin calls. As a result, these entities stopped offering farmers contracts. While farmers were the first to be blamed for $8.00 corn and other record high commodity prices, the unfortunate irony was that producers were not receiving those prices. Instead, the producer is now faced with rapidly decreasing prices, hoping for a high enough spot market price to cover ever increasing costs of production.

I understand the desire to increase margin requirements as a means chill speculation in the markets. I believe that for passive speculative investors who do not actually handle the physical commodity, increased margin calls could help address the impact that rampant and unregulated speculation is having in the marketplace. That said, margin requirements should not be increased on those entities using the commodity markets to buy and sell physical commodities. Doing so would simply exacerbate the problem facing agricultural producers today.

Post-Hearing Questions for the Record
Submitted to the Honorable Walter L. Lukken
From Senator Carl Levin

"Ending Excessive Speculation in Commodity Markets: Legislative Options"
June 24, 2008

1. In his testimony before the Commerce Committee on June 3, 2008, Professor Michael Greenberger stated: "[The legislation to close the Enron loophole] . . . was written by the exchange that needs to be regulated." Prof. Greenberger also stated: "[The legislation] was written by the Intercontinental Exchange, handed to the CFTC and then handed to Congress." (oral testimony, Senate Commerce Committee).

a. Please indicate whether these statements are accurate. Did ICE hand legislation to the CFTC, and then the CFTC hand that legislation to Congress?

These statements are not accurate. After an extensive public hearing on the topic, in October 2007, the CFTC sent a report to Congress that included recommended legislative changes to the regulation of certain electronic trading facilities known as Exempt Commercial Markets (ECMs). Staff of the CFTC's Office of General Counsel drafted suggested statutory text that would implement those recommendations, which was provided to Congress. CFTC staff then provided technical assistance to House and Senate staff who worked on compromise legislation throughout the fall and winter. In summary, no, ICE did not "hand legislation to the CFTC."

b. Who drafted the legislation that CFTC gave to Congress?

The CFTC's Office of General Counsel drafted suggested statutory text that would implement the agency's report recommendations, and that language was provided to Congress.

c. Who wrote the final legislation?

Congress wrote the final legislation.

d. During the legislative process, were there many aspects of the legislation that ICE disagreed with?

Yes, that is my understanding.

2. Prof. Greenberger told the Commerce Committee that the legislation to close the Enron loophole is ineffective. Is the legislation that was just enacted into law effective in closing the Enron loophole?

Yes. During recent months, the term "Enron loophole" has been used to refer to Section 2(h)(3) of the Commodity Exchange Act (CEA), a provision enacted as part of the Commodity Futures Modernization Act of 2000 that exempted trading on ECMs from most regulatory oversight.

The Farm Bill dramatically limited the scope of the Section 2(h)(3) exemption by imposing self-regulatory responsibilities on ECMs that list contracts that become significant sources of price discovery and by granting new oversight authorities to the CFTC with respect to such contracts (including large trading reporting, position limits, and emergency authority). In addition, ECMs with significant price discovery contracts, like designated contract markets and derivatives transaction execution facilities, are now deemed to be "registered entities" for purposes of the CEA and the Commission's regulations.

3. In his testimony, Prof. Greenberger stated: "There is now nothing in the law that sanctions foreign board of trades in the United States trading U.S. products being able to escape regulation . . . ." (oral testimony, Senate Commerce Committee) Is that accurate?

No, that is incorrect. Section 4(b) of the CEA prohibits the CFTC from regulating foreign boards of trade. Notably, Section 4(b) also recognizes that U.S.-based persons may seek to trade on foreign boards of trade as that section provides that the CFTC may adopt rules governing intermediaries who offer foreign board of trade products to U.S.-based persons.

4. In his testimony, Prof. Greenberger also stated: "[T]here is no statute to date that provides any exemption for U.S. trading on Foreign Boards of Trade. The Commodity Exchange Act says nothing about Foreign Boards of Trade." (written testimony, Senate Commerce Committee, p. 12.).

> a. Is there any statute that provides an exemption for U.S. trading on foreign boards of trade?
>
> Yes. Section 4(a) of the CEA provides that a futures contract must be traded on a futures exchange that has been designated as a contract market or registered as a derivatives transaction execution facility. However, Section 4(a) specifically excludes from this requirement futures contracts that are made on or subject to the rules of a board of trade, exchange, or market located outside the United States, its territories or possessions.

b. Does the term "foreign board of trade" appear in the Commodity Exchange Act? What does it provide?

The term "foreign board of trade" appears in Section 4(b) of the CEA, which prohibits the CFTC from adopting rules that: (1) require CFTC approval of any contract, rule, regulation, or action of any foreign board of trade, or (2) govern in any way any rule or contract term or action of any foreign board of trade.

5. In his testimony, Prof. Greenberger stated: "Virtually all parties now agree the Enron loophole must be repealed." (written testimony, Senate Commerce Committee, p. 3). Is that statement accurate?

While it's unclear to whom Professor Greenberger is referring, the statement is not accurate because the legislation enacted as part of the Farm Bill effectively closed the so-called Enron loophole.

6. In his testimony, Prof. Greenberger stated: "[B]y CFTC pronouncement, crude oil, gasoline and heating oil futures will not be covered by the new legislation." (written testimony, Senate Commerce Committee, p. 4).

a. Is that statement accurate? Has the CFTC ever announced that crude oil, gasoline, and heating oil contracts will not be covered by this legislation?

The statement is not accurate. The ECM provisions of the Farm Bill apply to all exempt commodities, which includes energy commodities. The CFTC has not made statements as to which contracts will or will not be deemed significant price discovery contracts, although it is widely assumed that the natural gas contract listed on the InterContinental Exchange (ICE Atlanta) will fall into this category. Currently, the CFTC is in the midst of drafting a proposed rulemaking on significant price discovery contracts and after that rule is finalized, the agency will review all ECM contracts to determine which are impacted by the legislation and its new regulatory regime.

b. Are all energy commodities covered by the legislation?

Yes, any commodity contract trading on an ECM that serves a significant price discovery function is covered by the legislation. ECMs are limited to trading exempt commodities, which includes all energy commodities.

7. In his testimony, Prof. Greenberger stated: "The CFTC has said that farm bill amendment will affect one out of thousands of energy contracts." (oral testimony, Senate Commerce Committee). Is that statement accurate? Has the CFTC ever said which percentage of contracts will be affected by the new legislation or that only one contract will be affected?

The CFTC has not indicated a specific number or percentage of contracts that will be impacted by the legislation – for the reasons listed in response to the previous question. If Professor Greenberger is referring to the natural gas contract traded on ICE Atlanta, while that is just one of many contracts listed by ICE Atlanta, it is my understanding that this one contract accounts for approximately 80% of the trading volume at ICE Atlanta.

8. In his testimony, Prof. Greenberger stated: "[The legislation to close the Enron loophole] puts 1,000 burdens on the CFTC and the public to prove that there needs to be regulation." (oral testimony, Senate Commerce Committee). He also stated: "It will doubtless be followed by lengthy and costly judicial challenges during which the CFTC and energy consuming public will be required to show that its difficult burden has not been met." (written testimony, Sen. Commerce Committee, p. 4).

a. Are those statements accurate?

The Farm Bill directs the CFTC to consider four discrete factors in making significant price discovery determinations. (In addition, the Farm Bill also gives the CFTC discretion to consider such other material factors as it "specifies by rule as relevant" to such a determination.) The CFTC is currently drafting a proposed rulemaking that will further elaborate on these factors, as well as establish a procedure for the CFTC in making these determinations.

b. Does the CFTC have a "difficult burden" to meet?

The evaluation of whether an ECM contract is a source of significant price discovery should be rather straightforward. The Farm Bill provisions do not establish any special presumptions or burdens of proof that the CFTC must overcome in making these determinations.

c. Is there any burden placed on the public?

No, the burden of determining whether a contract is a source of significant price discovery is left entirely to the CFTC, though the CFTC anticipates that its determination standards and procedures will include an opportunity for public comment.

d. Is judicial review authorized for CFTC decisions on which contracts perform significant price discovery functions?

A determination whether an ECM contract is a source of significant price discovery could be subject to judicial review just like any other CFTC administrative action. Under the Administrative Procedures Act, the judicial standard of review for setting aside a final agency action is generally whether the action is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.

9. In his testimony, Prof. Greenberger stated: "If the CFTC should be able to prove that an individual energy futures contract has contract has [sic] a 'significant price discovery function,' and thus should be subject to regulation, traders will almost certainly simply move their trading to equivalent contracts that remain exempt from regulation." (written testimony, Senate Commerce Committee, p. 4). Is that statement accurate? Will it be possible for traders to avoid regulation simply by trading different contracts?

This statement is not accurate because the CFTC has regulatory authority over contracts trading on all designated contract markets, derivatives transaction execution facilities, and significant price discovery contracts trading on any ECM. If traders move their trading from one ECM contract to a second equivalent ECM contract because the first contract has been determined to be a significant price discovery contract, more than likely such migration would lead to the second ECM contract becoming a significant price discovery contract as well. While an ECM trader could choose to trade energy derivatives off-exchange instead, such trading would have to be done in a negotiated, bilateral manner.

10. In his testimony, Prof. Greenberger stated: "Prior to the [Enron loophole], every futures contract – oil, collateralized debt obligations, credit default swaps -- had to be traded pursuant to regulation that had age-old and time-tested controls on speculation." (oral testimony, Senate Commerce Committee). Is that statement accurate? Prior to the Enron loophole, was the trading of these types of futures contracts and swaps subject to speculative position limits?

This is inaccurate. Only exchange-traded futures contracts have ever been subject to speculative limits. Over-the-counter derivatives have never been subject to speculative position limits.

Even with regard to exchange-traded futures contracts, the statement is only partially accurate. Before 1922 there was no federal regulation of futures contracts. Between 1922 and the Commodity Futures Trading Commission Act of 1974, only futures on certain specified agricultural commodities were subject to any federal regulation. The 1974 Act expanded the definition of "commodity" on which futures contracts had to be traded on a contract market. In the early 1980s the CFTC adopted rules that ultimately provided that all futures contracts were subject either to CFTC-established speculative position limits or some sort of exchange-established position limit.

11. In his testimony, Prof. Greenberger stated: "This [foreign board of trade] exemption was entirely the creation of CFTC staff and it has never been formally approved by the Commission itself." (written testimony, Commerce Comm., p. 6.) Is that statement accurate? Has the Commission ever approved the exemption for foreign boards of trade?

No, the statement is inaccurate. In 1999, the Commission itself directed that staff use the foreign board of trade "no-action" process. 64 FR 32829, 32830 (June 18, 1999). In 2006, the Commission unanimously released a Statement of Policy that affirmed the use of the staff no-action process for foreign boards of trade seeking to provide direct access

to their electronic trading systems. The Statement of Policy also provided guidance with regard to the scope of review by CFTC staff, including the addition of certain enhancements concerning information sharing and the appropriate response to trading that may adversely affect U.S. markets or the CFTC's oversight responsibilities. 71 FR 64443 (November 2, 2006).

12. In his testimony, Prof. Greenberger stated: "S. 2995 opens the door to any foreign exchange operating under an FBOT [Foreign Board of Trade] exemption escaping U.S. regulation for any U.S. delivered commodity . . . ." (written testimony, Senate Commerce Committee, p. 12.)

a. Would S. 2995 "open the door" to less regulation of U.S. commodities on a foreign board of trade?

S. 2995 essentially codifies the requirements that CFTC staff has imposed on ICE Futures Europe and the Dubai Mercantile Exchange in connection with their WTI crude oil contracts as conditions of their direct access to U.S. customers. The CFTC's basis for imposing these additional conditions on ICE Futures Europe and the Dubai Mercantile Exchange was the fact that their respective WTI contracts are settled against a contract traded on a U.S. futures exchange. S. 2995, by contrast, premises those conditions on a foreign board of trade listing "an energy contract that is physically delivered in the United States".

b. Would S. 2995 and its successor bill, S. 3129, make it easier or more difficult for a foreign exchange to operate within the United States?

The bills would statutorily condition direct access permission to foreign boards of trade on self-regulatory measures that were not previously required. Accordingly, the legislation would generally make it more difficult for a foreign exchange to operate within the U.S.

c. Would S. 2995 and S. 3129 strengthen the CFTC's ability to detect and prevent manipulation and excessive speculation?

To the extent that a contract traded on a foreign board of trade is based on "an energy contract that is physically delivered in the United States," and is linked to a contract traded on a U.S. futures exchange, the bills' conditions for foreign access would provide the CFTC with additional oversight tools to monitor such contracts. The combination of enhanced trading data and additional market controls would help the CFTC in its surveillance of regulated U.S. futures exchanges.

13. In his testimony, Prof. Greenberger stated: "The staff FBOT no action letter process never contemplated that an exchange owned by or affiliated with a U.S. entity would escape the CFTC regulation imposed on traditional U.S. exchanges." (written testimony, Commerce Committee, p. 6.) Is that statement accurate? Did the Commission ever

consider the issue of whether U.S. ownership or affiliation with a U.S. entity was a sufficient basis for the CFTC to be able to assert regulatory jurisdiction over the operations of an exchange?

In 2006, the CFTC specifically explored whether to develop an objective standard for determining whether an exchange is "located outside the United States" for purposes of Section 4(a) of the CEA. This inquiry was triggered in large measure by the affiliation between ICE Futures Europe and ICE Atlanta (the ECM). At that time, the Commission "decided not to adopt any objective standards establishing a threshold test of U.S. location" and instead directed staff to "continue to assess the legitimacy of any particular applicant to seek relief as a 'foreign' board of trade by considering the totality of factors presented by an applicant." 71 FR 64443, 64448 (November 2, 2006).

14. In his testimony, Prof. Greenberger stated: "For purposes of facilitating exempt natural gas futures, ICE is deemed a U.S. 'exempt commercial market' under the Enron loophole. For purposes of its facilitating U.S. WTI crude oil futures, the CFTC, by informal staff action, deems ICE to be a U.K. entity not subject to direct CFTC regulation . . . ." (written testimony, Senate Commerce Committee, p. 3.)

a. Are these statements accurate?

No, they are inaccurate. ICE Atlanta is an Exempt Commercial Market. ICE Futures Europe operates in London and is fully regulated by the U.K. Financial Services Authority (FSA). While affiliated, ICE Atlanta and ICE Futures Europe are each corporate entities, separate and distinct from one another under well-recognized principles of law in the U.S. and the U.K.

b. Has the CFTC deemed ICE to be a United Kingdom entity?

ICE Futures Europe is a U.K.-based and regulated entity. The CFTC has not "deemed" ICE Atlanta (a U.S.-based ECM) to be a U.K. entity.

Post-Hearing Questions for the Record
Submitted to the Honorable Walter L. Lukken
From Senator Thomas R. Carper

"Ending Excessive Speculation in Commodity Markets: Legislative Options"
June 24, 2008

Carper question for the record: "Let me just ask: What do we, as Members of the Senate, need to be looking at, not in the short term but over the long term, to help bring about some real and needed changes?"

CFTC insert for the record to respond to Carper inquiry:

The CFTC is best equipped to discuss issues specific to our area of expertise as the regulator of the U.S. futures and commodity options markets. The agency will continue to work with Congress in the short and long-term to ensure that these markets are functioning properly and that futures prices are accurately reflecting supply and demand fundamentals. Below you will find a list of recent CFTC energy-related initiatives to ensure the integrity and transparency of the futures marketplace. Since supply and demand and other fundamental factors have an impact on futures market prices, those issues would be worthy of further examination for long-term solutions.

Recent CFTC Energy Initiatives

• In July 2007, CFTC charges hedge fund Amaranth and its former head energy trader, Brian Hunter, with attempted manipulation of the price of natural gas futures.

• In August 2007, CFTC announces Marathon Petroleum Company agrees to pay $1 million penalty to settle charges of attempted manipulation in the crude oil market.

• In September 2007, CFTC holds public hearing on electronic exempt commercial markets (ECMs) that trade energy contracts (so-called "Enron Loophole").

• In October 2007, CFTC announces BP agrees to pay a total of $303 million in sanctions to settle charges of manipulation and attempted manipulation in the propane market.

• In October 2007, CFTC provides a report to Congress with legislative recommendations on ECM trading and closing the "Enron Loophole."

• In February 2008, CFTC creates Energy Markets Advisory Committee (EMAC), consisting of market users and participants to discuss energy policies.

• In May 2008, Congress passes CFTC reauthorization legislation as part of Farm Bill that:
  - o Closes the Enron Loophole using CFTC legislative language
  - o Increases CFTC penalties for manipulation
  - o Clarifies CFTC manipulation authority for principal to principal energy trades
  - o Clarifies CFTC retail foreign currency fraud authority
  - o Reauthorizes CFTC through 2013

• In May 2008, CFTC announces multiple energy initiatives, including:

o The CFTC's six month on-going National Crude Oil investigation.

o An Agreement to receive enhanced data from ICE Futures Europe in London on its crude oil markets to match our current information requirements. This enables CFTC to see U.S. participants in the London markets but also *foreign* traders that the CFTC would not normally see.

o An announcement that CFTC will begin to ask for more detailed information on index traders and swap dealers in the crude oil markets and will review whether this information is being properly classified for regulatory purposes.

• In June 2008, CFTC hosts first EMAC meeting to discuss the role of index traders, foreign boards of trade and swap dealers.

• In June 2008, CFTC forms interagency working group with the Federal Reserve, Treasury, SEC, DOE and USDA to study investor practices, fundamental supply and demand factors, and the role of speculators and index traders in the commodity markets.

• In June 2008, CFTC hosts 2nd annual international regulators enforcement meeting in Washington DC with 10 different nations participating to discuss on-going manipulation cases and practices.

• In June 2008, CFTC announces that it will revise its foreign board of trade policy and that ICE Futures Europe in London will establish comparable position and accountability limits on its crude oil contracts that are linked to NYMEX crude oil contracts.

• In July 2008, the CFTC charges Optiver Holding BV, two subsidiaries, and high-ranking employees with manipulation of NYMEX Crude Oil, Heating Oil, and Gasoline futures contracts.

• Since December 2002, the CFTC has filed a total of 42 enforcement actions charging a total of 72 defendants with violations involving the energy markets, and has assessed almost half a billion dollars in related civil monetary penalties.

Post-Hearing Questions for the Record
Submitted to the Honorable Walter L. Lukken
From Senator Susan M. Collins

"Ending Excessive Speculation in Commodity Markets: Legislative Options"
June 24, 2008

1. I applaud the work you have done with the U.K. Financial Services Authority (FSA) to modify the Foreign Board of Trade process so that ICE Futures Europe's direct access to U.S. customers is conditioned on implementation of position and accountability limits on its linked oil contract. But does that still leave a large gap in CFTC's ability to monitor large trades of the ICE Futures Europe's linked oil contract if they are not U.S. based trades?

   No. CFTC staff receive, or will shortly be receiving, position information on a daily basis with respect to all traders in the ICE Futures Europe WTI contract, irrespective as to where the trader established the position (*i.e.*, regardless of whether the trades come from U.S. based sites or sites in the U.K. or elsewhere).

2. You say the CFTC has levied more than half a billion dollars in civil penalties since 2002 and is working with the Justice Department on more than 35 criminal actions regarding market activity. As a general matter, have illegal attempts to manipulate commodity prices had a significant impact on price levels?

   Manipulation can have significant impacts on cash and futures prices with significant negative effects. For example, the Hunt silver market manipulation of 1979-1980 had a very significant impact on cash and futures silver prices. Also, the manipulation of the west coast electricity and natural gas markets in the early part of this decade by Enron and others had a very significant impact on cash prices on the West coast, with less impact on futures prices. The energy enforcement cases brought by the CFTC since 2002 have involved discrete incidents of manipulative conduct without evidence of significant sustained impact on price levels. Nevertheless, even these limited manipulations pose a threat to the futures and cash energy markets and ultimately to the economy generally. The significance of the wrongdoing is indicated by the civil penalties imposed.

3. One proposal that Senator Lieberman and I did not make last week, but one that others have suggested, is raising margin requirements on futures contracts. Would that be a constructive step?

   As I have testified in the past few months, margin in the futures markets is designed and used to ensure the financial integrity of all contracts traded on a regulated futures exchange and to avoid systemic risk. In the futures markets, clearinghouses set margin to cover the greatest possible 1-day move with a certain

amount of statistical confidence and to ensure that a default by any trader will not have systemic implications. It has been incredibly effective in ensuring the integrity of the clearinghouses and the overall financial system. I think raising margin to try to impact prices would not be effective and in fact could be detrimental – as it could reduce liquidity in the markets (thereby increasing volatility) or drive business overseas or into unregulated markets.

4. What might Congress do to address the current crisis in food and energy prices, in addition to the proposals we are discussing here today?

   The CFTC is best equipped to discuss issues specific to our area of expertise as the regulator of the U.S. futures and commodity options markets. The agency will continue to work with Congress in the short and long-term to ensure that these markets are functioning properly and that futures prices are accurately reflecting supply and demand fundamentals. Since supply and demand and other fundamental factors have an impact on futures market prices, those issues would be worthy of further examination for long-term solutions.

   Separately, the agency has struggled with low funding levels in recent years, and a substantial increase in the agency's budget would be beneficial to hire more staff and improve technology to continue to improve our efforts in overseeing the commodity futures and options markets.

Post Hearing Questions for the Record
Submitted to the Honorable James E. Newsome
From Senator Carl Levin

"Ending Excessive Speculation in Commodity Markets: Legislative Options"
June 24, 2008

1. In his testimony before the Senate Commerce Committee on June 3, 2008, Professor Michael Greenberger stated that the legislation to close the Enron loophole will be ineffective. Is the legislation that was just enacted into law as part of the farm bill effective in closing the Enron loophole?
   A: Section 2(h)(3) of the Commodity Exchange Act, which permitted unregulated trading of bi-lateral energy contracts, has been referred to as the Enron Loophole. The legislation enacted as part of the farm bill imposes regulation on energy transactions relying on Section 2(h)(3) in contracts that serve a significant price discovery function. It was never anticipated that the regulated energy markets and the unregulated energy markets would become highly linked and effectively trade as one broader market. That unexpected development caused a regulatory gap, which was highlighted by the collapse of Amaranth. By imposing core principles on significant price discovery contracts traded on electronic trading platforms that are linked to regulated markets, Congress effectively addressed a very serious public policy concern that threatened the integrity of the benchmark natural gas price on the highly regulated New York Mercantile Exchange. Under the new rules, once implemented by the CFTC, position limits/accountability levels, large trader reporting and emergency authority, among other requirements, will provide the needed transparency and oversight to ensure the integrity of U.S. energy markets that server a significant price discovery function.

2. In his testimony, Prof. Greenberger stated: There is now nothing in the law that sanctions foreign board of trades in the United States trading U. S. products being able to escape regulation..." (oral testimony, Senate Commerce Committee). Is that statement accurate?
   A: Section 4(a) of the CEA expressly removes from the CFTC's authority ", , , a contract which is made on or subject to the rules of a board of trade, exchange, or market located outside the United States, ... " commonly referred to as foreign boards of trade (FBOTs). It should be noted, however, that the CFTC has the ability to impose regulatory requirements on FBOTs through conditions in the No Action letter granting the relief from contract market designation.

3. In his testimony Prof. Greenberger stated: " Virtually all parties now agree the Enron loophole must be repealed. (written testimony, Commerce Comm., p.3). Is that statement accurate?
   A: No. As noted above, the so-called "Enron Loophole" is commonly used to refer to Section 2(h)(3) of the CEA. Section 2(h)(3), implemented under the CFMA, effectively provided legal certainty to a vast amount of energy trading and clarified that trading pursuant to that section of the CEA is subject to the CFTC's antifraud and anti-manipulation authority. While some

observers have called for the elimination of Section 2(h)(3), most parties believe that the provisions have served the intended purposes, including contributing to the growth and competitiveness of U.S. markets. Moreover, there was a broad consensus in Congress to amend Section 2(h)(3) rather than to repeal it. The markets developed in a way not anticipated by listing products for trading virtually identical to the futures contracts traded on regulated futures markets. That development required that changes be made to ensure the integrity of the markets, which was accomplished in the amendments to the farm bill.

4. In his testimony, Prof. Greenberger stated: [B]y CFTC pronouncement, crude oil, gasoline and heating oil futures will not be covered by the new legislation." (written testimony, Senate Commerce Committee, p. 4).
   a. Is that statement accurate?
   A: No. All energy commodities traded on an electronic trading platform that serve a significant price discovery function will be covered by the new law. The CFTC must make a determination that an agreement, contract, or transaction is performing a significant price discovery function, based on specific criteria.
   b. Has the CFTC ever announced that crude oil, gasoline, and heating oil contracts will not be covered by his legislation?
   A: NYMEX is not aware that the CFTC has made such an announcement.
   c. Are all energy commodities covered by this legislation?
   A: Yes. The legislation amends Section 2(h). Section 2(h) covers transactions in Exempt Commodities. "Exempt commodity" as defined in Section 1a(14) of the CEA "means a commodity that is not an excluded commodity or an agricultural commodity." Thus, the legislation would cover all energy commodities.

5. In his testimony, Prof. Greenberger stated: "The CFTC has said that farm bill amendment will affect one out of thousands of energy contracts." (oral testimony, Senate Commerce Committee). Is that statement accurate? Are you aware of any CFTC statements that this legislation will apply to only one contract?
   A: NYMEX is not aware of any formal pronouncements by the CFTC in this regard.

6. In his testimony, Prof. Greenberger stated: " Prior to the [Enron loophole], every futures contract – oil, collateralized debt obligations, credit default swaps-- had to be traded pursuant to regulation that had age-old and time-tested controls on speculation." (oral testimony, Sen Commerce Comm.). Is that statement accurate? Prior to the Enron loophole, was the trading of these types of futures contracts and swaps subject to speculative position limits?
   A1: Prior to the CFMA, bilateral energy transactions were traded pursuant to the 1993 Energy Exemption, but the transactions could not be cleared, or executed on an electronic trading platform, or they would be deemed illegal off-exchange futures contracts. Futures were distinguished from swaps transactions by, among other things, the ability to clear the transaction and standardized contract terms. A primary purpose of the CFMA was to provide legal certainty to OTC swaps transactions, so that the risk of certain OTC transactions being

declared legally void would be minimized. To that end, it established a new category of transactions, known as exempt transactions, which could be cleared and traded on an electronic trading facility, without being deemed illegal futures transactions.
A2: Bilateral energy transactions executed under the 1993 Energy Exemption were completely unregulated. They were not subject to speculative position limits. Bilateral energy trades were completely non-transparent to the CFTC and to the public. The transactions could not be executed on an electronic platform and could not be cleared. Prior to the 1993 Energy Exemption, bilateral energy swaps were transacted off exchange between commercial entities, but there was even greater legal uncertainty as illustrated by several court cases challenging the legality of certain energy swaps. See, e.g., *Transnor v. BP North America Petroleum*, 738 F. Supp. 1472 (S. D. N.Y. 1990).

7. In his testimony, Prof. Greenberger stated : "S. 2995 opens the door to any foreign exchange operating under an FBOT [Foreign Board of Trade] exemption escaping U.S. regulation for any U.S. delivered commodity...." (written testimony, Senate Commerce Committee, p. 12.)
    a. Would S. 2995 "open the door" to less regulation of U.S. commodities on a foreign board of trade?

    A: No. Foreign boards of trade seeking direct access would be subject to more regulation. S. 2995 would require the foreign board of trade to apply comparable principles or requirements for daily publication of trading information, position limits or accountability levels to those applied to a designated contract market. It would also require the foreign board of trade to provide comparable information as DCMs necessary to publish a commitment of traders report for energy commodities physically delivered in the U.S.

    b. Would S. 2995 and its successor, S. 3129, make it easier or more difficult for a foreign exchange to operate within the United States?

    A: It would potentially make it more difficult to the extent that the FBOT must apply regulatory requirements comparable to those applicable to U.S. DCMs.

    c. Would S. 2995 and S. 3129 strengthen the CFTC's ability to detect and prevent manipulation and excessive speculation?

    A: Yes. It would impose position limits and require additional transparency on foreign boards of trade. Position limits and large trader reporting are the key components of a market surveillance program aimed at preventing manipulation.

8. In his testimony, Prof. Greenberger stated: " The staff FBOT no action letter process never contemplated that an exchange owned by or affiliated with a U.S. entity would escape the CFTC regulation imposed on traditional U.S. exchanges." (written testimony, Senate Commerce Committee, p . 6.)
    a. Is that statement accurate?

    A: The FBOT no action process was intended to give foreign exchanges seeking direct access the ability to offer its slate of products to U.S. customers. It was not intended to provide a means for U.S. exchanges to circumvent U.S. laws, namely the

requirement that a futures contracts traded in the U.S. must be traded on a designated contract market or derivatives transaction execution facility.

b. Did the Commission ever consider the issue of whether U.S. ownership or affiliation with a U.S. entity was a sufficient basis for the CFTC to be able to assert regulatory jurisdiction over the operations of an exchange?

A: NYMEX would direct attention to the CFTC's Policy Statement on Foreign Boards of Trade issued in on October 27, 2006, where the CFTC focused on whether a FBOT was "bona fide" and subject to continued oversight by a regulator that has power to intervene in the market and share information with the Commission.

Post-Hearing Questions for the Record
Submitted to the Honorable James E. Newsome
From Senator Susan M. Collins

"Ending Excessive Speculation in Commodity Markets: Legislative Options"
June 24, 2008

1. Regarding the idea of higher margins for commodities contracts, several observers have warned that large and arbitrary increases above the level needed to absorb daily trading swings could have the perverse effect of driving prices higher by triggering a "shorts-covering rally." Do you think that it's a credible concern?

A: An arbitrary and artificial increase in margin levels for purposes other than financial integrity will have a number of predictable consequences but may also result in other consequences that are less predictable. One clear consequence is that it will reduce the liquidity of activity (of both commercials and non-commercials) on regulated futures exchanges and push this volume to less regulated markets in the U.S. and abroad. As a result, bid-ask spreads would widen and prices may very well become more volatile. In addition, more participants may shift their trading activity to "day trading," where positions are leveled out by the end of the trading session in order to avoid maintaining any overnight positions that would require margin to be posted. This shift to day trading would accelerate short-term price movements and thus could further exacerbate price volatility. It is difficult to predict how higher margins would impact a particular side of the market (unless the margins were targeted for only longs or only shorts). What is clear is that artificial margin levels would add

new and substantial distortions to trading on U.S. futures markets, which in some circumstances could result in prices being driven higher.

2. You testified that the share of non-commercial open interest in NYMEX crude oil futures declined over the past year as prices rose, that non-commercials are "relatively balanced" between long and short open positions, and that swaps dealer have been short on net. Then how do you explain the tight correlation between chart lines of futures prices and total speculative positions?
   A: A correlation of course does not in any way establish a causal relationship between A and B. What is necessary is to set forth a convincing explanation as to how speculators on futures exchanges can affect prices when futures prices are primarily affected by prices in the far larger market for the physical crude commodity.

3. What might Congress do to address the current crisis in food and energy prices, in addition to the proposal s we are discussing here today?
   A: NYMEX believes that the solution to the current crisis in food and energy entails efforts to increase the available supply of crude oil and to reduce demand. It is important to take into account that crude oil operates in a global market. Any new policies, such as increasing the available supply, must be considered against that context. NYMEX does not believe that the proposals currently being discussed to restrict participation on futures exchanges will have any impact on food or energy prices.

Post-Hearing Questions for the Record
Submitted to Michael W. Masters
From Senator Susan M. Collins

"Ending Excessive Speculation in Commodity Markets: Legislative Options"
June 24, 2008

1. You note in your written testimony that "Some limited speculation in the commodities futures markets provides beneficial liquidity to the primary constituency (bona fide physical hedgers)." Could regulators maintain that essential component of non-commercial speculation with tools like position limits rather than outright bans on institutional investment?

Since the Commodity Exchange Act of 1936, speculative position limits have been the preferred (and most effective) method for eliminating excessive speculation while maintaining necessary speculation (i.e. the speculation necessary to provide liquidity to the marketplace).

I do not favor an outright ban on institutional investment. Instead I favor an outright ban on commodity **index** investment by anyone whether they are an institution or an individual. The reason I favor this ban is that Index Speculators consume liquidity by "buying and holding" commodities futures for the ultra long term. They buy without regard for the underlying supply and demand and therefore they damage the price discovery function. So they provide no benefits to the commodities futures markets but they exact a high cost.

2. You suggest that requiring all over-the-counter trades to clear through futures exchanges would ensure the effectiveness of speculative position limits. Might this not drive trades overseas or to other venues poorly visible to U.S. regulators?

In my testimony I discussed why I do not believe that the imposition of position limits and the ban on commodity index investment will result in significant migration of commodities futures trading to overseas markets.

In regard to requiring over-the-counter trades to clear through futures exchanges. I think that requiring swaps to clear through the exchanges would probably result in more trades being initiated on the futures exchanges in the first place rather than occurring in the OTC markets and then being cleared through the exchanges.

There is a very important distinction between financial futures and commodities futures. Financial futures can indeed be traded from anywhere and there are few ways to prevent migration of that trading to overseas markets. But commodities futures are vastly different because they call for the physical delivery of tangible commodities at locations within the United States. It is impossible for an unregulated Dubai exchange for instance

to trade a West Texas Intermediate Crude Oil futures contract with a physical delivery provision in Cushing Oklahoma. Physical producers and consumers will always prefer a futures contract with physical delivery provisions. The United States is the largest consumer of energy in the world and U.S. energy consumers (along with their non-U.S. trading partners) are going to always prefer a U.S. futures contract with U.S. regulation and U.S. delivery points.

3. What might Congress do to address the current crisis in food and energy prices, in addition to the proposals we are discussing here today?

First of all let me say as I answer this question that I think it also answers the question posed by Senator Carper when he asked "What do we, as Members of the Senate, need to be looking at, not in the short term but over the long term, to help bring about some real and needed changes?"

The United States is experiencing both a chronic and an acute problem. The U.S has a chronic energy problem just like a morbidly obese person that knows that they need to eat less and exercise more. We know that we need to consume less energy and we need to find new domestic sources of energy. I favor an "all of the above" approach to achieve long term energy independence enacting almost all of the energy proposals put forth because I believe among other things that it is a matter of national security.

But we have an acute problem as well – excessive speculation and index speculation. It is as if we are having a heart attack. We need to treat the acute problem immediately and thoroughly in order to then be able to tackle the chronic problem. When somebody is having a heart attack you don't put them on the treadmill and tell them to work out. So I am hopeful that Congressional Leaders on both sides of the aisle can see these issues as not mutually exclusive but in fact building one upon the other.

Post-Hearing Questions for the Record
Submitted to Professor Michael Greenberger
From Senator Susan M. Collins

"Ending Excessive Speculation in Commodity Markets: Legislative Options"
June 24, 2008

1. **In recent weeks the CFTC announced a new data sharing agreements with London, that it is doing a study of speculators to be delivered in September and that it needs more money. Do you believe this is adequate to improve oversight of futures markets, or are further actions required?**

The CFTC announced on May 29, 2008 that it would collect substantial amounts of new data to determine what is undergirding high energy prices. That release was divided into three parts: (1) an attempt to collect additional data not previously within the CFTC's possession about trading activities pertaining to the InterContinental Exchange (ICE)'s WTI contract; (2) the collection of new data pertaining to index trading by swaps dealers, e.g., certain investment banks and hedge funds; and (3) the public announcement of an ongoing nationwide crude oil investigation commenced by the CFTC in December 2007 looking into possible unlawful trading malpractices. On June 17, 2008, the CFTC amended its No-Action Letter with ICE Futures Europe, requiring, among other things, large trader reporting and position limits, stating that if ICE satisfied the new conditions, the CFTC "[would] not recommend that the Commission institute enforcement action against [ICE] based upon [its] failure to seek contract market designation or registration as a DTEF under Sections 5 and 5a of the Act."

While commendable and necessary, these additional requirements will not alone solve the problem. It is self evident that ICE, in its capacity as the second largest trader of WTI, was almost certainly going to be an entity of interest to the CFTC in its market investigation. The seeming subservience of the CFTC to ICE in negotiating with the exchange over the information the agency deems necessary for its investigation of the U.S. crude oil markets is akin to asking a key witness to an investigation whether and to what extent it will agree to turn over material relevant to the investigation. That is simply not the way in which a serious investigation is conducted.

Remedying the regulatory loophole known as the "London/Dubai" Loophole through the use of large trader reporting and speculation limits will not create the long-term solution of ensuring that the crude oil markets adhere to market fundamentals. As exemplified by ICE, many of these exchanges have a plan to have ties to the U.S. that go beyond terminal placement. In so doing, these exchanges are no longer "foreign," and the CFTC has the authority by itself to require all U.S.-based energy futures contracts traded on U.S.-based trading terminals to be traded on regulated contract markets. Requiring trading to take place on U.S.-regulated

exchanges gives the CFTC far greater authority to monitor market trends and the trading practices of market participants. Furthermore, it would give the CFTC the authority to enforce self-surveillance requirements on energy markets. Oversight of this nature also would allow the CFTC to react in real time to prevent systemic risk, exercising "its most potent tool" when it has reason to believe an emergency exists—the immediate right to alter on a real time basis margin requirements and speculation and position limits, to deal with crises which prevent the market from accurately reflecting the forces of supply demand.

Additionally, the CFTC was correct in concluding that larger and more detailed data sets are necessary to assess the impact of index positions on oil prices. The data collected by the CFTC for the September 15 report has generally been recognized as highly confusing, with the "facts" bearing no relationship to its conclusions. The report also did not collect the data from the physical crude oil markets. Complete analysis of one market cannot be achieved unless its sister markets have been examined as well.

2. What might Congress do to address the current crisis in food and energy prices, in addition to the proposals we are discussing here today?

In an ongoing effort to curb the rising cost of food and energy prices, Congress must pass legislation that returns commodity markets to the attributes required under the Commodity Exchange Act, i.e., ensuring that these markets are principally for commercial interests to hedge business risk and to limit the positions of speculation in these markets, which can sever the operation of the markets from economic fundamentals. One of the most effective methods of controlling speculative investment is through the use of aggregated position limits. Under the existing regulatory regime, speculation limits are only applied to each regulated contract market; no aggregate positions are imposed. A trader may spread speculation over a host of regulated and unregulated contract markets, thereby satisfying one exchange's limits yet still accumulating a disproportionately large share of an energy market. Aggregate position limits, however, impose limits across the entire energy market and prevent a trader from doing so. Yours and Senator Lieberman's Commodity Speculation Reform Act of 2008, S.3248, would establish a framework to impose aggregated speculation limits on the energy and food markets.

Senate Majority Leader Reid's Stop Excessive Energy Speculation Act of 2008, S.3268, largely adopted S.3248's aggregate speculation limits approach for energy and agriculture markets. Senator Reid's billed failed cloture on July 25, 2008 on a 50-43 vote. Senator Reid's bill did not address agriculture markets. The next Congress should pass bills of this nature as a comprehensive re-regulation of these markets.

Post-Hearing Questions for the Record
Submitted to Professor Michael Greenberger
From Senator Pete V. Domenici

"Ending Excessive Speculation in Commodity Markets: Legislative Options"
June 24, 2008

1. **What statistical data can you provide to support claims that speculators in the energy market are contributing $20, $30, or even $40 to the price per barrel of crude oil?**

My testimony about speculation's impact on crude oil markets was in the first instance grounded in and supported by financial statistical data included within the June 2006 Permanent Subcommittee on Investigations ("PSI") staff report. Relying on economic analysts, that study concluded that the speculative purchase of oil futures had needlessly driven up the price of energy commodities above what economic fundamentals would dictate, adding, for example, what the PSI staff estimated to be @ $20-$25 per barrel to the price of crude oil. At the time of that estimate, the price of crude oil had reached a then-record high of $77. Supportive evidence that speculation had continued to affect energy prices comes from Michael Masters, in a September 2008 report, which demonstrates that in the first five months of 2008, speculators had poured over $60 billion into commodity indices. He concluded this buying pressure led to the purchase of about 187 million barrels of WTI crude oil futures, and was "a primary factor in the $33 per barrel increase in the WTI crude oil price."

On June 23, 2008, or the day before the hearing in question, respected oil market analysts testified before the U.S. House Energy and Commerce Subcommittee on Oversight and Investigations that consumers were paying a substantial speculative premium for crude oil products. At the time, the price of a barrel of oil was around $130. Mr. Roger Diwan from PFC Energy, testified that market fundamentals would dictate that a barrel of crude oil be between of $70 to $90 to be profitable. Mr. Edward Krapels, from Energy Security Analysis, Inc., testified that a fundamentally supportable price could be as low as $80 or $90 a barrel. Finally, at the May 21, 2008 hearing before the Senate Judiciary Committee, Robert Malone, Chairman and President of BP American Inc., testified that the market price of oil should be between "35 and 65 dollars a barrel." John Hofmeister, President of Shell Oil Company, testified that the $35 to $65 a barrel estimate has "been consistent in [the] ability to run a successful company."

In mid-July 2008, oil was at a record high of over $147. By Labor Day, the price had dropped to $97, or a $50 drop in about six weeks. Masters describes the mid-July drop as "a mass stampede for the exits," as speculators withdrew approximately $39 billion from the market.[1] It is my opinion that that significant drop in oil prices is explained by

[1] Michael Masters, THE ACCIDENTAL HUNT BROTHERS—ACT 2 4 (Sept. 2008), available at http://www.stopoilspeculators.com/PDF/huntbrothers-act2.pdf.

speculators' response to increased and vigorous May, June, and July 2008 Congressional oversight and Executive branch agency regulation caused by that May to July oversight, all of which suppressed speculation.

Moreover, that oversight led to two pieces of legislation that were seriously considered in July and August 2008 that would have required vigorous new oversight of speculation within energy futures markets. Senate Majority Leader Reid's Stop Excessive Energy Speculation Act of 2008, S.3268, attempted to extract the speculative premium on crude oil by imposing hard and fast aggregated speculation limits over both regulated and unregulated crude oil futures trading done in the United States. While Senator Reid's billed failed a cloture vote on July 25, 2008, by a vote of 50-43, even many of its opponents conceded that controls on speculation were needed as part of a comprehensive energy program. Additionally, in late July, the House proposed the Commodity Markets Transparency and Accountability Act of 2008, H.R.6604, which later passed overwhelmingly on a vote of 283-133. This, too, required substantial oversight of speculation in the energy futures markets. It is doubtless that these two bills will get serious consideration in the next Congress. Speculators therefore were leaving these markets at their own pace before being driven out by the kind of speculation limits that were the heart of both pieces of legislation that would drive them out under adverse trading circumstances.

Congressional oversight also forced the Bush Administration into substantial regulatory action in June and July 2008, which also helps explain the deflation of the crude oil bubble. On May 29, 2008, the CFTC for the first time publicly announced it was six months into an investigation of the crude oil markets. On June 17, 2008, the CFTC imposed new conditions on the InterContinental Exchange (ICE), requiring large trader reporting and the imposition of speculation limits. On July 18, 2008, it announced the reclassification of Vitol's trading positions in the energy futures markets from the Commercial category to the Noncommercial, or speculative, category. This recategorization boosted the number of crude oil futures contracts never subject to speculation limits by 25%. On July 24, 2008, the CFTC charged a global proprietary trading fund with manipulation and attempted manipulation of energy futures contracts.[2] Finally, in August 2008, the FTC proposed a very tough new rule anticipating a vigorous investigation of crude oil futures markets.[3]

On August 6, 2008, Robert McCullough, who uncovered Enron's manipulation of western energy prices in 2002, released a report finding this May through July 2008 Congressional and regulatory activity was statistically "highly significant," and was "the only variable that would have affected excess speculation as opposed to supply and demand fundamentals." All of these regulatory activities were aimed at eliminating

---

[2] CFTC, Press Release, CFTC Charges Optiver Holding BV, July 24, 2009, available at http://www.cftc.gov/newsroom/enforcementpressreleases/2008/pr5521-08.html.

[3] FTC, Press Release, *FTC Seeks Comments on Proposed Rule Prohibiting Petroleum Market Manipulation*, Aug. 13, 2008, available at http://www.ftc.gov/opa/2008/08/nprm.shtm; proposed rule at 16 C.F.R. pt. 317 (Aug. 19, 2008).

excessive speculation in energy markets and, accordingly, as McCollough shows, resulted in a precipitous drop in oil prices, from a high of over $147 in mid-July, to a low of $97 by Labor Day. Prices have continued to decline to @ $67 a barrel by October 22, 2008, or a roughly $80 drop since mid-July. Although the post-Labor Day decline in prices of $30 can be attributed in part to the current credit crisis, that crisis has also forced speculators to unwind positions to collect badly needed cash.

2. **You have claimed that the exemption, passed by Congress in 2001, for over-the-counter energy derivatives, the so-called "Enron Loophole," was added at the last minute to a Senate bill that was suddenly attached to the Omnibus Appropriations Act for FY 2001. As a member of the Appropriations Committee at the time, my recollection is that the provision was in fact contained in a House-passed bill, introduced and marked-up by the House Agriculture Committee, and while it is true that the legislative vehicle ultimately was the Omnibus Appropriations bill, the energy provisions were thoroughly reviewed by the committees of jurisdiction and that every member of the President's Working Group under then-President Bill Clinton signed a letter endorsing their content. Does this differ from your recollection, and if so, how?**

As shown below, the Enron Loophole was adopted by the House Agriculture Committee and House of Representatives in H.R. 4541, and later, H.R. 5660, over the longstanding and carefully articulated strenuous objection of the President's Working Group on Financial Markets ("PWG"). Then-General Counsel for the CFTC, Robert Paul, argued extensively before the House Agriculture Committee that the Enron Loophole should not be adopted, following the rationale of the PWG's November 1999 report to Congress. At that time, the PWG consisted of Treasury Secretary Laurence Summers, Federal Reserve Head Alan Greenspan, Securities and Exchange Commission Chairman Arthur Levitt, and CFTC Chairman William J. Rainer. While the House adopted the Enron Loophole on October 2000, there was no explanation or analysis either in Committee or before the House about why the Committee rejected the recommendation of Messrs. Greenspan, Summers, Levitt, and Rainer (as well as CFTC General Counsel Robert Paul). In fact, the Senate Agriculture Committee expressly rejected adoption of the Enron Loophole and urged that any accommodation made to Enron and others be through transparent and public rulemaking under section 4(c) of the Commodity Exchange Act, which allows the CFTC discretion to exempt any transaction from any of the provisions of the CEA, but ***only*** after a fully transparent, public rulemaking, including notice and opportunity for public comment. The petition for such a rule would have had to demonstrate that any energy futures exemption would not lead to fraud or manipulation and would be in the public interest. Such a rule would have been subject to judicial review. The Senate Agriculture Committee's rejection of the Enron Loophole came after CFTC Chairman Rainer argued at length before that Senate Committee that this kind of loophole envisioned by the House not be adopted in the Senate and that the PWG's recommendation not to exempt energy futures from regulation

be followed. Prior to the Senate's hasty December 15, 2000 consideration of the legislation that would become the Enron Loophole, the CFMA had never been brought to the Senate floor.

In that vein, the "Enron Loophole" was suddenly attached to the roughly 11,000 page Omnibus Appropriations Act for FY 2001 in the closing days of a lame duck Congress. On December 14, 2000, identical bills S. 3283 and H.R. 5660 were introduced. Both bills contained the H.R. 4541 version (previously rejected by the Senate Agriculture Committee and never before presented to the full Senate); H.R. 5660's Enron Loophole was inserted within the 262-page bill, which, as mentioned above, was added to an 11,000 page Omnibus Appropriations Act on the last day of a lame duck Congressional session, December 15, 2000. Again, there was never a public explanation provided as to why the House rejected the PWG's recommendation. Indeed, the fact that the House version was stuck in a Senate bill was never mentioned in debate over the legislation in the Senate on December 15, 2000. Nor was the Enron Loophole made part of the Congressional Record for that day.

Again, in November 1999, the PWG (Mssrs. Summers, Greenspan, Levitt, and Rainer) issued a report that stated the PWG did not support deregulation of the energy and metals futures markets: "Due to the characteristics of markets for non-financial commodities with finite supplies, however, the Working Group is unanimously recommending that the exclusion [from the CEA] not be extended to agreements involving such commodities." The report specifically cited attempts to manipulate metals markets as an example of a nonfinancial commodity with finite supplies.[4]

Furthermore, Senate Agriculture Committee hearings held on February 10, 2000, emphasize that any bill which exempted energy commodities departed from the PWG recommendations:

- Laurence Summers, then Treasury Secretary and Head of the PWG, stated in testimony before the Senate Agriculture, Nutrition, and Forestry Committee, when Senator Lugar asked Mr. Summers what types of instruments *should* remain within the regulatory ambit of the CEA: "Where price manipulation is a significant risk, particularly because of finiteness of supply, there is a very strong case for regulation."[5]

- Alan Greenspan, former Head of the Federal Reserve and member of the PWG, made statements that reflect the PWG's emphasis on financial products: "As Secretary Summers has already testified, in the case of *financial OTC* derivatives transactions between professional counterparties, the

[4] President's Working Group for Financial Markets, OTC DERIVATIVES MARKETS AND THE CEA 16, 17 (Nov. 1999), available at http://www.ustreas.gov/press/releases/reports/otcact.pdf.

[5] President's Working Group Report of OTC Derivatives—CEA Re-authorization, S. HRG. 106–826, 106th Cong. 2nd session p. 8 (emphasis added).

Working Group has agreed that such regulation is unnecessary and that such transactions should be excluded from coverage of the act. Furthermore, the exclusion should extend to the electronic trading of such contracts by such participants. The rationale for these positions is straightforward. OTC transactions in financial derivatives are not susceptible to manipulation, and professional counterparties simply do not require the protections that the CEA provides for retail investors."[6]

- Annette Nazreth, then Director of the Division of Trading and Markets at the CFTC emphasized the understanding that exemptions were for financial commodities: "Second, the Report explores questions raised when electronic systems facilitate the trading of OTC derivatives. The Report recommends . . . . excluding electronic systems that limit their participants to sophisticated counterparties trading for their own accounts, *as long as the systems are not used to trade contracts that involve non-financial commodities with finite supplies.*"[7]

In spite of this widely-recognized concern for energy and metals commodities by all the major voices in the President's Working Group on Financial markets, H.R.4145, introduced on May 25, 2000, departed from the PWG recommendations. It included an early version of the Enron Loophole. Robert Paul, then-General Counsel to the CFTC, reiterated the PWG's concern and recommendations on June 14, 2000. Before the House Committee on Agriculture Subcommittee on Risk Management, Research, and Specialty Crops, he expressed the Commission's concern with the potential codification of an exemption for transactions in energy and metal commodities. He noted that H.R. 4541 had diverged from the recommendation of the PWG and the CFTC. At no time was this concern brought to the attention of the full House when considering the draft CFMA legislation. Mr. Paul stated in pertinent part:

> "In addition, H.R. 4541 would codify an exemption from most provisions of the Commodity Exchange Act for transactions in energy and metal commodities. *This is one area in which H.R. 4541 diverges from the recommendations of the President's Working Group, and the Commission believes that these provisions raise concerns that have yet to be resolved.*
>
> The Commission notes that exemptions for metal and energy commodities, particularly as they relate to electronic trading systems that approximate exchange environments, *are not governed by the same considerations that formed the basis of the Working Group's recommendations with respect to financial*

[6] *Id* p. 13.
[7] PWG Report, *supra* n. 3 at 17-18 (emphasis added).

products.

While there are some similarities between the trading of financial products and non-financial products, there are also significant differences. For example, the Working Group, in recommending an exclusion from the CEA for financial derivatives, noted that'most of the dealers in the swaps market are either affiliated with broker-dealers or FCMs that are regulated by the SEC or the CFTC or are financial institutions that are subject to supervision by bank regulatory agencies. Accordingly, the activities of most derivatives dealers are already subject to direct or indirect Federal oversight.' (PWG at 16, emphasis added). The same cannot be said for trading in energy or metal derivatives. Also, as with agricultural commodities, the prices set on regulated exchanges for products such as copper, crude oil or home-heating oil have significance beyond the participants in those markets.

The CFTC has already exempted many types of energy trading from the provisions of the Commodity Exchange Act. *But the exemption for energy commodities included in H.R. 4541 expands the scope of the Commission's existing exemptions for such contracts.* The Commission's 1993 energy exemption is limited to those parties with the capacity to make or take delivery, but H.R. 4541 would extend the exemption to encompass eligible contract participants as defined in the bill, not just those acting in a commercial capacity. The 1993 energy exemption is also limited to transactions in which the material economic terms are subject to negotiation and that are prohibited from being cleared. H.R. 4541 specifically permits clearing and contains no limits on standardization of contract terms. In essence, unlike the Commission's current energy exemption, H.R. 4541 envisions exempting transactions that mimic those that are conducted in a traditional exchange environment. *It is this multilateral trading aspect of the proposed statutory exemption that concerns the Commission.*

The Commission recognizes that the proposed exemption is still subject to Sections 5b, 12(e)(2)(B), 4b, 4n, 4c(b), 6(c), 9(a)(2) and to such transparency rules or regulations as the Commission may impose. We support the retention of these sections, including the Commission's antifraud, antimanipulation, and preemption authority, and we support the authority to promulgate rules or regulations relating to transparency requirements. In addition, we recommend the Commission be given the authority to promulgate rules and regulations pursuant to the specified sections of the Act. In providing the Commission with the responsibility to police for

> fraud and manipulation, that responsibility can best be carried out if the Commission is also granted the concomitant authority to promulgate appropriate regulations.
>
> *In the Commission's experience, prices on certain metals have been manipulated, and we believe that futures and option transactions in these commodities require full regulatory oversight by the CFTC to protect the markets and their participants from unlawful practices.* The Commission believes that, in developing an appropriate regulatory scheme, it would be appropriate to review contracts on a case-by-case basis utilizing the criteria set forth in our regulatory reform package, which considers risk of manipulation, the degree to which a contract serves a price discovery function, and characteristics of the market participants. As the discussion over the treatment of energy and metal commodities progresses, the Commission will continue to work with the Chairman and members of the subcommittee to find an acceptable resolution of this issue."[8]

H.R. 4541 retained the provisions exempting energy commodities, and though it passed through three House Committees, Commerce Chairman Thomas J. Bliley, Jr. noted, it was "rare to see deliberation of a bill of such magnitude in such a tight time schedule." The House's "race to move the measure prevented lawmakers from focusing on the issue of whether and how OTC derivatives should be regulated."[9] Lawmakers on the House Commerce and Banking panels also complained about the short time they had to consider the legislation and said it did not contain enough consumer protections.[10] On October 19, 2000, the House passed H.R. 4541 under suspension of the rules, thus cutting short any further debate. There was no "thorough analysis" of the Enron Loophole or explanation of why the advice of Mssrs. Summers, Greenspan, Levitt, and Rainer, and Paul was being rejected.

When the Senate companion bill to H.R. 4541, S.2697, was introduced on June 8, 2000, it did not include the "Enron Loophole" provision as it was ultimately formulated in H.R. 5660 and passed in the Omnibus Appropriations Act. In a joint committee hearing between the Senate Agriculture Committee and Senate Committee on Banking, on June 21, 2000, William J. Rainer, Chairman of the CFTC, testified that "the Commission has reservations, however, about [S.2697's] exclusion of OTC energy derivatives from the CEA . . . . [which] diverges from the recommendations of the President's Working Group, which limited the proposed exclusion to financial

---

[8] Testimony, Robert Paul June 14, 2000 p. 61-62 (emphasis added), available at: http://commdocs.house.gov/committees/ag/hag10654.000/hag10654_0f.htm (last accessed Sept. 24, 2008).

[9] *Another House Subcommittee OKs Rewrite of Commodities Law*, 2000 CQ ALMANAC, Banking & Finance 5-16, 5-17.

[10] *Commodities Exchange Bills Emerge from Two House Panels,* 2000 CQ ALMANAC, Banking & Finance 5-17.

derivatives. The Commission believes the distinction drawn by the Working Group between financial and non-financial transactions was a sound one and respectfully urges the Committees to give weight to that distinction."

The two-paragraph section of the 93-page Senate Report out of the Committee on Agriculture, Nutrition, and Forestry does little to indicate that the exemption for electronically traded energy derivatives was "thoroughly reviewed." The August report simply noted that S.2967 would allow for exemption of transactions of nonagricultural products traded between institutional entities on a bilateral basis and that the "CFTC is encouraged to use its current exemptive authority, as appropriate and consistent with the public interest, under section 4(c) of the CEA to exempt transactions between eligible contract participants that occur on an electronic trading facility."

It is important to note that S.2697 never went to a vote on the Senate floor and was in fact declared dead by Senator Gramm in late October 2000.[11] It was not until December that Senator Gramm reemerged bringing forth another version of the bill;[12] it was recognized that negotiations concerning the text of the bill were held almost exclusively between Senator Gramm and *representatives from the futures industry.*[13] Review of the provisions inserted by Senator Gramm was conducted by the Treasury Department, but this review was focused on the impact that revisions would have on financial instruments and the banking industry and it did not look at the deregulation of energy futures markets.

As mentioned, S. 2967 and H.R. 4541 are noteworthy for the "lack of customary attention that [they] received."[14] The Congressional Record indicates that where support was offered for the CFMA, only two provisions in the legislation were extolled: the legal certainty for over-the-counter swaps and authorization of single-stock futures.[15] The PWG's letter endorsing the CFMA is a *one* paragraph summary support that focuses on

---

[11] Pamela Barnett, *Gramm Says Major CEA Revision Must Wait Until Next Year*, CONGRESSDAILY/A.M., October 30, 2000 (reporting that Senator Gramm decided that no reform bill could be passed in 2000 and that it was best to wait until the following year). It is worth noting that Senator Gramm had presented one last legislative counter offer that many said strayed 'far' from Gramm's usual position on regulation and appeared to be 'a capitulation' to the Chicago futures exchanges. *Gramm Unveils Counter Offer*, CONGRESSDAILY/A.M., October 30, 2000.

[12] Pamela Barnett, *Gramm Proposal Renewing Prospects for CEA Reform*, CONGRESSDAILY, December 6, 2000 (reporting that Gramm had brokered a deal by granting to the Chicago futures exchanges the deregulation they desired, while making some other concessions to opponents in Congress); Brody Mullins, *Familiar Issues Linger as Beleaguered 106th Seeks Adjournment*, CONGRESSDAILY/A.M., December 7, 2000 (stating that with Senator Gramm's agreement with the futures industry has paved the way for the Commodity Exchange Act reform legislation to move swiftly through Congress).

[13] Pamela Barnett, *Gramm, Futures Exchanges Reach Agreement Over CEA*, CONGRESSDAILY, December 7, 2000 (explaining that legislation to reform the CEA is moving rapidly and negotiations "have narrowed ... to include just Gramm and the futures industry.") (emphasis added).

[14] Phillip Johnson & Thomas Hazen, DERIVATIVES REGULATION, SUPP. 2008 32.

[15] 147 CONG. REC. S11946-01.

the Act's ability to bring legal certainty and affect OTC markets. There is no detailed support for the Enron Loophole or statement that the PWG had changed its mind. On Friday evening, December 15, 2000, as the Senate was recessing for the holidays and without any announcement to the Senate, the Enron Loophole was embedded via the 262-page bill, and added to the 11,000+ page omnibus House Appropriations Bill. The Senate spokespersons never noted that the Senate Agriculture Committee had previously rejected the provisions contained in the House version of the bill. Neither did they note that this House version of the bill contained provisions that were in direct contravention of the recommendations made by the PWG. When the CFMA was introduced as a rider to the conference version of the Omnibus Appropriations bill, neither that bill as a whole (or its companion bill, S.3283) nor the Enron Loophole within it had ever been before the Senate.

In sum, this legislative history makes clear that "energy provisions were **[not]** thoroughly reviewed by the committees of jurisdiction" and that "every member of the President's Working Group under then-President Bill Clinton" had expressly *opposed* the Enron Loophole in great and elaborate detail. The only evidence to the contrary was a one paragraph summary recommendation of approval for the bill as a whole on December 15, 2000, without any full analysis addressed to the sudden inclusion of the Enron Loophole, as the Clinton administration was in its waning days and as that Congress was adjourning.

Post-Hearing Questions for the Record
Submitted to Dr. James J. Angel
From Senator Susan M. Collins

"Ending Excessive Speculation in Commodity Markets: Legislative Options"
June 24, 2008

1. **Do you agree with Mr. Masters' assertion that speculators create a virtual demand for product that drives up prices?**

Speculators can drive the price of a commodity either up or down depending on their trading. A wave of buying by speculators can push the price up, and a wave of selling can push the price down. It is important to realize that speculators --even when they are net long – may also have a stabilizing impact on price. For example, some speculators take on the risk that the producers don't want. This may encourage more producers to produce because their risk is lower. For example, suppose that that it would be economically feasible to fix an old oil well and start pumping if oil were over $100 per barrel. But because prices may fall, a producer may not want to take the risk. The ability to sell oil long-term oil futures to speculators may induce the producer to fix the old well.

2. **In your testimony you say the CFTC needs the authority to gather information, provide transparency, set position and margin limits, study the impact of leveraged hedged funds, and additional budgetary resources. In recent weeks the CFTC announced new data sharing agreements with London, that it is doing a study of speculators to be delivered in September, and that it needs more money. Do these announcements completely address your recommendations?**

These announcements are a step in the right direction. However, London is not the only foreign jurisdiction on the planet. The CFTC needs to have the ability to gather whatever data it needs to understand what is driving activity in the markets it regulates. This includes human and financial resources in addition to legal authority.

3. **What might Congress do to address the current crisis in food and energy prices, in addition to the proposals we are discussing here today?**

The recent softening of energy prices may provide a little relief, but it is important to remember that the underlying problem will not go away. Unless there is a fundamental change in our policy towards petroleum, we will find ourselves in an even worse position in a few years.

Petroleum prices have been volatile ever since the beginning of the oil industry. It takes a long time to find and develop new sources of oil. Likewise, it takes a long time for

consumers to adapt their behavior in the face of changing prices. Thus, the industry has always been on a roller coaster between shortages and gluts. To make matters worse, much of the remaining supply of oil is in politically unstable areas. Our dependence on volatile foreign oil is causing significant damage to our economy.

The advent of biofuels now links together the price of food and energy, meaning the food is now tied to the energy roller coaster.

In the meantime, our planet is choking on our carbon dioxide emissions and we are facing the prospect of catastrophic climate change. Furthermore, consumers of imported oil do not bear all of the costs to society of burning oil because they do not pay directly for the pollution or the political instability financed by petro-dollars.

The implications are clear: We must start immediately to transition away from petroleum and other carbon-based fuels. A carbon tax is an economically efficient way to do this, but also politically unpalatable at the moment. We are thus faced with second-best alternatives. A well designed market-based cap-and-trade system is the next best thing, as it will use market forces to cut carbon emissions.

So what will we do for energy? We must provide an environment conducive to the invention and implementation of non-carbon based fuels. It is not clear which technologies will be the best. The prudent approach is to create the right economic incentives for the production of clean energy and let the market figure it out. In addition, the federal government should take the lead and plan to source all of its energy needs from domestic renewable sources.

These steps include:

1) **Phase in mandates for the federal government to purchase 100% of its U.S. energy consumption from domestic renewable resources within 10 years.** (Obviously, consumption by U.S. facilities such as embassies outside the U.S. would be exempt, as would DoD. State and local governments would also be required to purchase 100% clean domestic renewable energy or face loss of federal funding.) Such guaranteed government business would create some certainty in the renewable energy industry that there will be a steady demand for their output. It will also provide critical scale economies, pushing down the cost.
2) **Require that new federal purchases of motor vehicles meet energy efficiency standards much stricter than CAFE.**
3) **Create a market-based "cap and trade" system for carbon-dioxide reductions that applies to all carbon-dioxide emissions.** Such a system must be carefully designed to make sure that it is effective and that it does not just export carbon pollution to other countries with less strict standards.
4) **Increase federal spending on basic research helpful for alternative energy production and efficient energy utilization.**
5) **In the short-term, support using the Strategic Petroleum Reserve to moderate price fluctuations.**

6) **Create tax incentives for investments in new clean domestic energy facilities, including solar, nuclear, geothermal, wind, and hydroelectric.**
7) **Remove regulatory roadblocks to construction of new nuclear power plants.**
8) **Put a floor on the price of oil so that the low prices that will occur in the coming glut will not reduce the economic incentive for conservation.** While prices are high, put in an Energy Independence Tax that would only kick in when oil prices are below $100. The tax would be $100 less the price of oil. Thus, if oil were $60 per barrel, the tax would be $40. The revenue would be used to cover investments in renewable energy sources.

○