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Carl Levin, Chairman
Tom Coburn, Acting Ranking Minority Member

EXCESSIVE SPECULATION IN THE WHEAT MARKET

MAJORITY AND MINORITY STAFF REPORT

PERMANENT SUBCOMMITTEE ON INVESTIGATIONS UNITED STATES SENATE



JUNE 24, 2009

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EXCESSIVE SPECULATION IN THE WHEAT MARKET

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EXCESSIVE SPECULATION IN THE WHEAT MARKET

I. EXECUTIVE SUMMARY

For several years, the U.S. Senate Permanent Subcommittee on Investigations has been examining the role of speculation in the commodity markets and failures of the federal regulatory structure to prevent excessive speculation from causing unwarranted changes in commodity prices and an undue burden on interstate commerce.

In 2006, the Subcommittee released a report showing how the injection of billions of dollars from speculation into the commodity futures markets had contributed to rising energy prices.¹ In 2007, the Subcommittee released a report and held a hearing showing how excessive speculation by a single hedge fund named Amaranth had distorted natural gas prices and contributed to higher costs for natural gas consumers.² These and other reports offered a number of recommendations for legislative and regulatory actions to enable the Commodity Futures Trading Commission (CFTC) to fulfill its mission under the Commodity Exchange Act to prevent excessive speculation from “causing unreasonable or unwarranted fluctuations in the price of commodities in interstate commerce.”

¹In its 2006 report, “*The Role of Market Speculation in Rising Oil and Gas Prices: A Need to Put the Cop Back on the Beat*,” S.Prt. 109-65 (June 27, 2006), the Subcommittee investigation found that influx of billions of dollars into the U.S. energy markets through commodity index funds had contributed to the rise in energy prices, and that the large influx of speculative investments in these markets had altered the traditional relationships between futures prices and supplies of energy commodities, particularly crude oil. The Report recommended that Congress enact legislation to “close the Enron loophole,” the provision in the Commodity Futures Modernization Act of 2000 (CFMA), which exempted from regulation the trading of futures contracts and swaps for energy and metals commodities on electronic exchanges. It also recommended legislation to ensure the CFTC had sufficient authority to monitor U.S. traders trading in U.S. commodities on foreign exchanges. See the 2006 Subcommittee report at <http://hsgac.senate.gov/public/files/SenatePrint10965MarketSpecReportFINAL.pdf>.

²In its 2007 report, “*Excessive Speculation in the Natural Gas Market*,” reprinted in S.Hrg. 110-235 (June 25 and July 9, 2007), at pp. 196-710, the Subcommittee investigation found that Amaranth had distorted the price of natural gas futures contracts as a result of its large purchases of contracts on the regulated New York Mercantile Exchange (NYMEX) and “look-alike” swap contracts on the then-unregulated Intercontinental Exchange (ICE). As a result of several provisions in the CFMA, the CFTC did not have authority to limit the positions of traders using ICE rather than NYMEX. Based on this finding, the Report recommended that Congress enact legislation to close the Enron loophole in order to fully regulate electronic exchanges, like ICE, that are the functional equivalent of futures markets. In the 2008 Farm Bill, Congress enacted legislation to close the Enron loophole by providing that commodity contracts traded on over-the-counter electronic exchanges that perform a significant price discovery function be regulated in the same manner as futures contracts. As a result of this legislation, the CFTC now has the authority – and responsibility – to regulate and monitor these electronic markets to prevent excessive speculation. See the 2007 Subcommittee report at <http://hsgac.senate.gov/public/files/REPORTExcessiveSpeculationintheNaturalGasMarket.pdf>.

In the Amaranth investigation, the Subcommittee examined how the activities of a single trader making large trades on both a regulated futures exchange and an unregulated electronic energy exchange constituted excessive speculation in the natural gas market. To prevent this type of excessive speculation, the Subcommittee report recommended that limits on the number of contracts that a trader can hold at one time, known as position limits, be applied consistently to both markets in which the same type of natural gas contracts are traded.

In the current investigation, the Subcommittee has examined how the activities of many traders, in the aggregate, have constituted excessive speculation in the wheat market. To prevent this type of excessive speculation, this Report recommends that the CFTC phase out waivers and exemptions from position limits that were granted to commodity index traders purchasing wheat contracts to help offset their sales of speculative financial instruments tied to commodity indexes.

A commodity index, like an index for the stock market, such as the Dow Jones Industrial Average or the S&P 500, is calculated according to the prices of selected commodity futures contracts which make up the index. Commodity index traders sell financial instruments whose values rise and fall in tune with the value of the commodity index upon which they are based. Index traders sell these index instruments to hedge funds, pension funds, other large institutions, and wealthy individuals who want to invest or speculate in the commodity market without actually buying any commodities. To offset their financial exposure to changes in commodity prices that make up the index and the value of the index-related instruments they sell, index traders typically buy the futures contracts on which the index-related instruments are based. It is through the purchase of these futures contracts that commodity index traders directly affect the futures markets.

The Subcommittee investigation examined in detail how commodity index traders affected the price of wheat contracts traded on the Chicago Mercantile Exchange. CFTC data shows that, over the past three years, between one-third and one-half of all of the outstanding wheat futures contracts purchased (“long open interest”) on the Chicago exchange are the result of purchases by index traders offsetting part of their exposure to commodity index instruments sold to third parties. The Subcommittee investigation evaluated the impact that the many purchases made by index traders had on prices in the Chicago wheat futures market. This Report finds that there is significant and persuasive evidence to conclude that these commodity index traders, in the aggregate, were one of the major causes of “unwarranted changes”—here, increases—in the price of wheat futures contracts relative to the price of wheat in the cash market. The resulting unusual, persistent, and large disparities between wheat futures and cash prices impaired the ability of participants in the grain market to use the futures market to price their crops and hedge their price risks over time, and therefore constituted an undue burden on interstate commerce. Accordingly, the Report finds that the activities of commodity index traders, in the aggregate, constituted “excessive speculation” in the wheat market under the Commodity Exchange Act.

The futures market for a commodity provides potential buyers and sellers of the commodity with prices for the delivery of that commodity at specified times in the future. In contrast, the cash market provides potential buyers and sellers with the price for that

commodity if it is delivered immediately. Normally, the prices in the futures market follow a predictable pattern with respect to the cash price for a commodity. Typically, as a contract for future delivery of a commodity gets closer to the time when the commodity is to be delivered under the contract (the expiration of the contract), the price of the futures contract gets closer to the price of the commodity in the cash market. The prices are said to “converge.” In recent years in the wheat market, however, the futures prices for wheat have remained abnormally high compared to the cash prices for wheat, and the relationship between the futures and cash prices for wheat has become unpredictable. Oftentimes the price of wheat in the Chicago futures market has failed to converge with the cash price as the futures contract neared expiration.

The result has been turmoil in the wheat markets. At a time when wheat farmers were already being hit by soaring energy and fertilizer costs, the relatively high price of wheat futures contracts compared to the cash price, together with the breakdown in the relationship between the two prices and their failure to converge at contract expiration, have severely impaired the ability of farmers and others in the grain business to use the futures markets as a reliable guide to wheat prices and to manage price risks over time.

Participants in the grain industry have complained loudly about the soaring prices and breakdowns in the market. “Anyone who tells you they’ve seen something like this is a liar,” said an official of the Farmers Trading Company of South Dakota. An official at cereal-maker Kellogg observed, “The costs for commodities including grains and energy used to manufacture and distribute our products continues to increase dramatically.” “I can’t honestly sit here and tell who is determining the price of grain,” said one Illinois farmer, “I’ve lost confidence in the Chicago Board of Trade.” “I don’t know how anyone goes about hedging in markets as volatile as this,” said the president of MGP Ingredients which provides flour, wheat protein, and other grain products to food producers. “These markets are behaving in ways we have never seen,” said a senior official from Sara Lee. A grain elevator manager warned, “Eventually, those costs are going to come out of the pockets of the American consumer.”

The inability of farmers, grain elevators, grain merchants, grain processors, grain consumers, and others to use the futures market as a reliable guide to wheat prices and manage their price risks over time has significantly aggravated their economic difficulties and placed an undue burden on the grain industry as a whole.

This Report concludes there is significant and persuasive evidence that one of the major reasons for the recent market problems is the unusually high level of speculation in the Chicago wheat futures market due to purchases of futures contracts by index traders offsetting sales of commodity index instruments. To diminish and prevent this type of excessive speculation in the Chicago wheat futures market, the Report recommends that the CFTC phase out existing exemptions and waivers that allow some index traders to operate outside of the trading limits designed to prevent excessive speculation.

A. Subcommittee Investigation

To prepare this Report, the Subcommittee conducted a year-long, bipartisan investigation. As a first step, the Subcommittee obtained and analyzed price and trading

data from a variety of agricultural futures and cash markets. The Subcommittee obtained, for example, daily and monthly wheat futures and cash price data from the CFTC, U.S. Department of Agriculture, Chicago Mercantile Exchange, Kansas City Board of Trade, and Minneapolis Grain Exchange. The Subcommittee also examined numerous historical materials on the operations and performance of the grain futures markets, and on the development and application of relevant statutes, regulations, and guidance. The CFTC provided extensive data on index trading, as well as information on the application of position limits and the granting of exemptions. The Subcommittee appreciates the cooperation and responsiveness of the exchanges and federal agencies.

To understand the issues, the Subcommittee interviewed numerous experts and persons familiar with the wheat markets, agricultural commodity markets as a whole, and commodity indexes. The interviews included persons familiar with grain trading and actual traders from a wide range of organizations in the grain industry: farm organizations, grain elevator operators, grain merchants, grain processors, food manufacturers, and agricultural trade groups. The Subcommittee also interviewed farmers, market analysts, agricultural economists, academic experts, financial institutions, and exchange officials. The Subcommittee also benefitted from a number of meetings and presentations provided by the CFTC. The Subcommittee appreciates the cooperation and assistance of these individuals, organizations, and agencies.

B. The Cash and Futures Markets for Wheat

Wheat crops change hands primarily through cash transactions. There is no centralized cash market for wheat or other grains; the cash market exists wherever a grain elevator, grain merchant, grain consumer, or other participant in the grain industry posts a price to purchase or sell grain. Cash transactions take place all over the country, at all times of the day, either with or without the use of standardized contracts. In a common transaction, a grain elevator purchases wheat from a farmer for cash and then stores the wheat for sales throughout the year to grain processors.

Wheat futures are sold on three regulated exchanges: the Chicago Mercantile Exchange (CME), the Kansas City Board of Trade (KCBOT), and the Minneapolis Grain Exchange (MGEX). Wheat traded on the Chicago exchange, known as “soft red winter” wheat, is used mainly for crackers, pie crusts, cakes, and biscuits. Wheat traded in Kansas City, known as “hard red winter” wheat, is primarily used to make flour for bread. The Minneapolis exchange trades “hard red spring” wheat, which also is used to make bread, biscuits, and rolls.

All three of these futures exchanges offer standardized contracts to buy or sell standard amounts and types of wheat for which the only negotiated variable is the price. In the vast majority of cases, traders of wheat futures contracts do not take physical delivery of the wheat being bought or sold on the futures market. Rather, the primary purpose of the futures market is to enable market participants to “discover” the price of wheat for delivery at specified times in the future, to purchase or sell such contracts for future delivery at such prices, and thereby to enable wheat market participants to protect their business activities against the risk of future price changes.

C. Increasing Commodity Index Speculation

A commodity index is calculated using the prices of the futures contracts for the commodities that make up the index. Each commodity within a commodity index is assigned a “weight,” and the contribution of each commodity toward the value of the index is calculated by multiplying the current price of the specified futures contract for that commodity by the assigned weight. All of the major, broad-based commodity indexes include soft red winter wheat futures contracts traded on the Chicago exchange as one of their component commodities.

The purchase of a financial instrument whose value is linked to a commodity index offers the buyer the potential opportunity to profit from the price changes in futures contracts for a broad spectrum of commodities, without having to actually purchase the referenced commodities. Typically, hedge funds, pension funds, and other large institutions purchase these financial instruments with the aim of diversifying their portfolios, obtaining some protection against inflation, and profiting when commodity prices are rising. Since they are not involved in selling or buying actual commodities, and do not use these instruments to hedge or offset price risks regarding the actual use of the underlying commodities, the purchasers of commodity index instruments are making a speculative investment.

The large growth in commodity index speculation is a recent phenomenon. It is only over the past six years that financial institutions have heavily marketed commodity index instruments as a way to diversify portfolios and profit from rising commodity prices. The total value of the speculative investments in commodity indexes has increased an estimated tenfold in five years, from an estimated \$15 billion in 2003, to around \$200 billion by mid-2008.³

The amount of speculation in the wheat market due to sales of commodity index instruments has, correspondingly, grown significantly over the past five years. CFTC data indicates that purchases by index traders in the largest wheat futures market, the Chicago Mercantile Exchange, grew sevenfold from about 30,000 daily outstanding contracts in early 2004, to a peak of about 220,000 contracts in mid-2008, before dropping off at year’s end to about 150,000 contracts. (Figure ES-1). The data shows that, during the period from 2006 through 2008, index traders held between 35 and 50% of the outstanding wheat contracts (open long interest) on the Chicago exchange and between 20 and 30% of the outstanding wheat contracts on the smaller Kansas City Board of Trade.

The presence of index traders is greatest on the Chicago exchange compared to the other two wheat exchanges, and is among the highest in all agriculture markets. In addition, neither of the other two wheat markets, nor any other grain market, has experienced the same degree of breakdown in the relationship between the futures and cash markets as has occurred in the Chicago wheat market. Accordingly, the

³ This estimate reflects both the actual amounts invested in commodity index related instruments and the appreciation in value of those investments due to increasing commodity prices.

Subcommittee focused its investigation on the role of index trading on the Chicago exchange and the breakdown in the relationship between Chicago wheat futures and cash prices.



Figure ES-1. Growth in index fund purchases of Chicago wheat futures contracts. Chart prepared by Permanent Subcommittee on Investigations. Data source: CFTC.

D. Impact of Index Instruments on the Wheat Futures Market

Commodity indexes have an indirect but significant impact on futures markets. A commodity index standing alone is a computational device unsupported by any actual assets such as futures or commodity holdings. Financial institutions that sell index investments, however, have created three basic types of financial instruments tied to commodity indexes: commodity index swaps, exchange traded funds (ETFs), and exchange traded notes (ETNs). Commodity index swaps are sold by swap dealers and are the most common index instrument; ETFs and ETNs offer index-related shares for sale on a stock exchange. The value of commodity index swaps, index-related ETFs, and index-related ETNs rises and falls with the value of the commodity index upon which each is based.

Speculators who buy index instruments do not themselves purchase futures contracts. But the financial institutions who sell them the index instruments typically do. In the case of commodity index swaps, for example, swap dealers typically purchase futures contracts for all commodities on which an index is based to offset their financial exposure from selling swaps linked to those futures contracts. CFTC data shows that,

over the past five years, financial institutions selling commodity index instruments have together purchased billions of dollars worth of futures contracts on the Chicago Mercantile Exchange.

The Subcommittee investigation has found that the large number of wheat futures contracts purchased by swap dealers and other index traders is a prime reason for higher prices in the wheat futures market relative to the cash market. Commodity traders call the difference between the futures prices and the cash price “the basis.” Index traders typically do not operate in the cash market, since they have no interest in taking delivery or making use of a wheat crop. Instead, index traders operate in the futures markets, where they buy futures contracts to offset the index instruments they have sold. The additional demand for wheat futures resulting from these index traders is unrelated to the supply of and demand for wheat in the cash market.

In the Chicago wheat market, the result has been wheat futures prices that are increasingly disconnected from wheat cash prices. Data compiled by the Subcommittee shows that, since 2006, the daily gap between Chicago wheat futures prices and wheat cash prices (the basis) has been unusually large and persistent. Figure ES-2 presents this data for the last eight years.

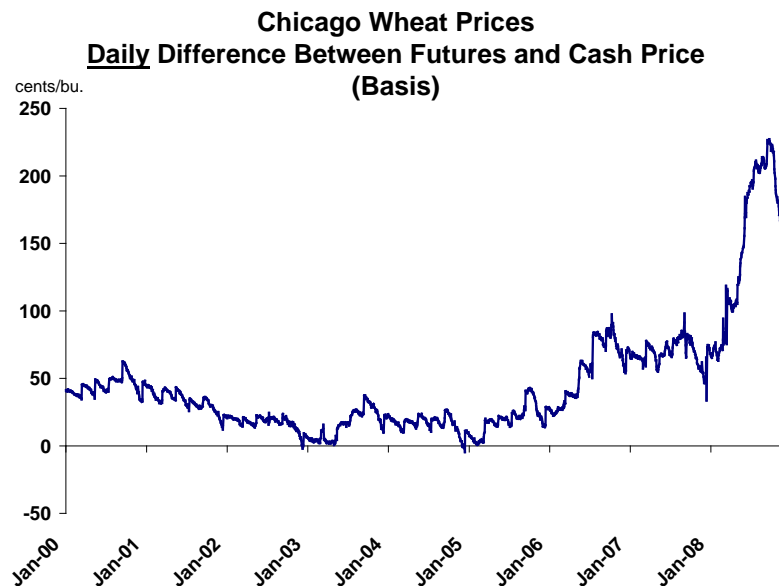


Figure ES-2. Increase in daily difference between futures and cash prices for Chicago wheat. Chart prepared by Permanent Subcommittee on Investigations. Data sources: CME (daily futures prices); MGEX (average daily cash prices).

From 2000 through 2005, the average daily difference between the average cash and the futures price for soft red winter wheat traded on the Chicago exchange was about 25 cents. During the second half of 2008, in contrast, the price of the nearest wheat futures contract on the Chicago exchange was between \$1.50 and \$2.00 per bushel higher

than the average cash price, an unprecedented price gap (basis).⁴ During that period, the average cash price for soft red winter wheat ranged from \$3.12 to \$7.31 per bushel, while the futures price ranged from \$4.57 to \$9.24. The fundamentals of supply and demand in the cash market alone cannot explain this unprecedented disparity in pricing between the futures and cash markets for the same commodity at the same time.

In addition, increasingly, the wheat futures prices on the Chicago exchange have not converged with the cash prices at the expiration of the futures contracts. Figure ES-3 shows the extent of this price gap (basis).

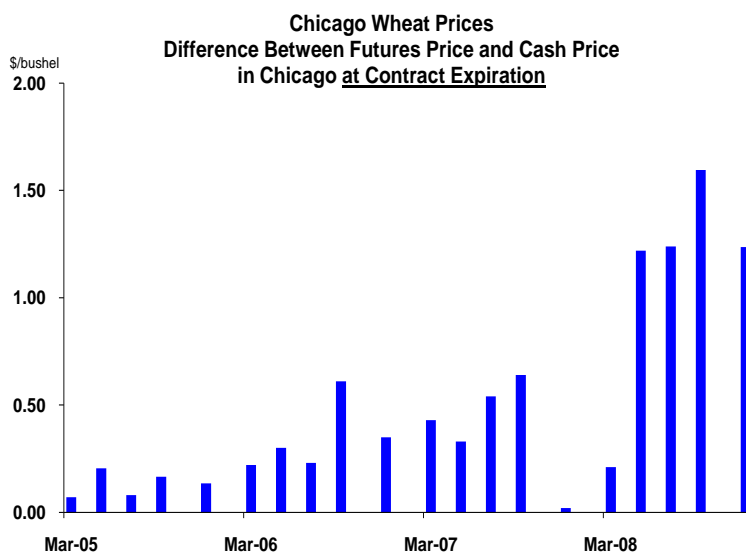


Figure ES-3. Increase in difference between futures and cash prices for Chicago wheat at futures contract expiration. Chart prepared by Permanent Subcommittee on Investigations. Data sources: CME (daily futures prices) and USDA (cash prices at Chicago).

The data underlying this chart shows that the average difference between the cash and futures price at contract expiration at the delivery location in Chicago for the Chicago wheat futures contract rose from an average of about 13 cents per bushel in 2005 to 34 cents in 2006, to 60 cents in 2007, to \$1.53 in 2008, a tenfold increase in four years.

In the same period during which these pricing disparities occurred, CFTC data shows a very large presence of index traders in the Chicago wheat market. Since 2006, index traders have held between one-third and one-half of all of the outstanding purchased futures contracts (“long open interest”) for wheat on the Chicago exchange. For most of 2008, the demand for Chicago wheat futures contracts from these index investors was greater than the supply of wheat futures contracts from commercial firms

⁴ Typically, traders define basis as the difference between the cash and futures price (basis = cash – futures). In this report, the basis is defined as the difference between the futures and cash price (basis = futures – cash) in order to give a positive value to the basis when the futures price is higher than the cash price, as it typically is in the wheat market.

selling grain for future delivery. During July 2008, for instance, index traders buying wheat futures contracts held, in total, futures contracts calling for the delivery of over 1 billion bushels of wheat, while farmers, grain elevators, grain merchants, and other commercial sellers of wheat had outstanding futures contracts providing for the delivery of a total of only about 800 million bushels of wheat. Under these circumstances, the additional demand from index traders for contracts for future delivery of wheat bid up the futures prices until prices were high enough to attract additional speculators willing to sell the desired futures contracts at the higher prices.

The investigation found that, in 2008, the greater demand for Chicago wheat futures contracts generated by index traders was a significant factor in the relative increase in the wheat futures price compared to the cash price (the basis) during that period. In addition, a significant cause of the resulting price disparity between the futures and cash markets, which was far greater than the normal gap between futures and cash prices, was the purchases of Chicago wheat futures by index traders.

E. Undue Burden on Interstate Commerce

The ongoing pricing discrepancy between wheat futures and cash market prices has exacerbated many of the recent economic difficulties facing farmers, grain elevators, grain merchants, and grain end-users.

Over the past few years, the prices of many agricultural commodities—like the prices of commodities in general—experienced an unprecedented spike and subsequent collapse. For example, the cash price of wheat rose from just over \$3 per bushel in mid-2006, to over \$11 per bushel in early 2008, before collapsing to about \$3.50 per bushel at the end of 2008. Figure ES-4 shows the average daily cash price of wheat from 2000-08, including the spike in the price of wheat during 2007-08.

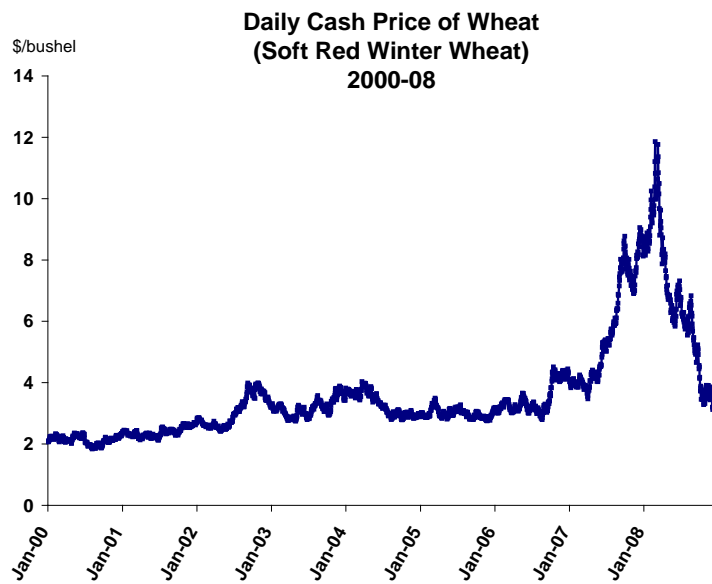


Figure ES-4. The average daily cash price of soft red winter wheat, the type of wheat traded on the Chicago Mercantile Exchange. Chart prepared by Permanent Subcommittee on Investigations. Data source: MGEX (daily cash index price).

A wide variety of factors contributed to the price volatility in the cash market for wheat, including poor weather, changes in agricultural productivity, an increasing demand for commodities in developing countries, changing dietary habits, increasing energy prices, and changes in the value of the dollar compared to other currencies.

Wheat prices in the cash market rose steadily from 2004 to 2008, in part due to steep increases in the price of energy, particularly oil, gasoline, natural gas, and diesel fuel, which sharply increased the costs of farming, transporting grain to markets, and grain processing. Although grain prices in the cash market eventually rose to record highs, farmers and grain merchants often were unable to realize the benefits of those higher prices due to the higher costs. In March 2009, for example, USDA reported that although wheat was selling for very high prices by historical standards, the increase in fuel and fertilizer costs had “offset this unprecedented runup in wheat prices for producers.”

During this same period, futures prices also rose. The steep increases in cash and futures prices severely affected the grain industry in several ways. First, higher futures prices resulted in higher margin calls for wheat farmers, grain elevators, and other sellers of wheat that had hedged in the futures markets, requiring them to make much larger cash outlays than normal. The National Grain and Feed Association estimated, for example, that a typical grain elevator faced a 300% increase in hedging costs in 2008, compared to 2006. It stated that “recent commodity price increases have led to unprecedented borrowing by elevators – and unprecedented lending by their bankers – to finance inventory and maintain hedge margins.” According to the Federal Reserve Bank of Kansas City, in the first quarter of 2008, the Farm Credit System “raised \$10 billion in

funds through the sale of debt securities to meet increasing demand from elevators and other processing and marketing entities.” In April 2008, the Federal Reserve Bank of Kansas City reported that nearly one-quarter of all grain elevators it surveyed were struggling to acquire the cash needed to manage margin calls; about 40% stated they had ‘enough cash to just manage current margin calls.’”

The cash flow problems confronting many grain elevators directly affected farmers, as those elevators began to reduce their cash purchases, pull back on forward contracts offered to farmers, and lower the cash prices offered for crops. Some began to require farmers to pre-pay for seed and fertilizer, causing cash flow problems for farming operations. Farmers participating directly in the futures market also were subject to rising margin calls. One wheat farmer explained, “If you’ve got 50,000 bushels hedged and the market moves up 20 cents, that would be a \$10,000 day. If you only had \$10,000 in your margin account, you’d have to sit down and write a check. You can see \$10,000 disappear overnight. ... Everybody has a story about a guy they know getting blown out of his hedge.”

Other problems arose from the unusually large and persistent gap between the futures and cash prices for wheat and the failure of the two prices to converge as futures contracts expired. This persistent pricing difference and lack of convergence meant that farmers, grain elevators, grain merchants, and others who had used the futures market to hedge their future sales found that when they went to sell their wheat, the cash prices were much lower than they had anticipated based upon the futures market. This persistent price gap significantly impaired the ability of farmers and others to protect themselves from declining prices during the dramatic price decreases experienced during the second half of 2008. It also meant that wheat industry participants could no longer rely on the futures markets to reliably price their crops and effectively manage their price risks over time.

In a properly functioning futures market, futures and cash prices converge as futures contracts near expiration. Otherwise, if one price were higher, a trader could buy the commodity in the lesser-priced market and immediately sell it in the higher-priced market for a quick profit. Those types of transactions would soon equalize the two prices. But on many occasions during the last few years in the Chicago wheat market, the two prices have not converged.

One key reason is that the large price disparity between the cash and futures price makes it much more profitable for grain merchants to buy grain in the cash market, hold onto it, and then sell it later—at the price of the higher-priced futures contracts—than engage in the type of transactions described above between the cash and futures market that would make the two prices converge. In addition, the large price disparity means that merchants who already have grain in storage and have hedged that grain by selling futures contracts could suffer a loss if they decided to actually sell their grain in the cash market, because they also would have to buy back the futures contract at a higher price than they could get for selling their grain in the cash market.

Virtually all of the traders interviewed by the Subcommittee, from all perspectives within the grain business, identified the large presence of index traders in the Chicago

market as a major cause of the price convergence problem. This ongoing problem indicates that at a fundamental level the Chicago wheat futures market no longer effectively serves the needs of many wheat growers or commercial wheat users.

Still another set of problems caused by excessive speculation in the wheat market and the disconnect between wheat futures and cash prices affects the federal crop insurance program. Federal crop insurance, which is supported with taxpayer dollars, is available to farmers who want to cover potential financial losses due to bad weather or crop disease. Several types of federal crop insurance use futures prices to determine how much money should be paid to a farmer who has purchased coverage and suffered a loss in crop income. Futures prices are used in the formulas that calculate both the insurance premiums to be paid by farmers and the indemnity payments made to farmers after an insurance claim. Because they are included in the calculations, futures market prices that are significantly higher than actual cash prices impair the accuracy of the insurance formulas and can inflate the final figures. Futures prices that are much higher than the prices in the cash market and that do not closely follow the prices in the cash market can increase both the crop insurance premiums paid in part by farmers and can either increase or decrease the ultimate insurance payout to the farmer—thereby either resulting in too large a payout from a taxpayer-funded program or too small a payout to the farmer who has paid for the insurance. Either scenario undermines the effectiveness of the crop insurance program.

The ongoing large gap between wheat futures prices and cash prices is a problem of intense concern to the wheat industry, the exchanges, and the CFTC. The CFTC has conducted several public hearings and recently formed a special advisory subcommittee to make recommendations on how best to address the problem. The Chicago exchange has amended its wheat contract in several respects—to provide for additional delivery locations, to increase the storage rate for wheat, and to change certain specifications for deliverable wheat—in an effort to improve trading and create a more active cash market that will force cash and futures prices to converge.

These actions to date, however, do not address one of the fundamental causes of the problem—the large presence of index traders in the Chicago wheat market. These index traders, who buy wheat futures contracts and hold them without regard to the fundamentals of supply and demand in the cash market for wheat, have created a significant additional demand for wheat futures contracts that has as much as doubled the overall demand for wheat futures contracts. Because this significant increase in demand in the futures market is unrelated to any corresponding supply or demand in the cash market, the price of wheat futures contracts has risen relative to the price of wheat in the cash market. The very large number of index traders on the Chicago exchange has, thus, contributed to “unwarranted changes” in the prices of wheat futures relative to the price of wheat in the cash market. These “unwarranted changes” have, in turn, significantly impaired the ability of farmers and other grain businesses to price crops and manage price risks over time, thus creating an undue burden on interstate commerce. The activities of these index traders constitute the type of excessive speculation that the CFTC should diminish or prevent through the imposition and enforcement of position limits as intended by the Commodity Exchange Act.

F. Trading Limits on Index Traders

The Commodity Exchange Act (CEA) directs the CFTC to prevent excessive speculation in the futures markets. Specifically, Section 4a(a) of the CEA requires the CFTC to establish and maintain “position limits” on commodity traders to prevent the undue burden on interstate commerce that results from “sudden or unreasonable fluctuations or unwarranted changes” in the price of a commodity caused by excessive speculation. Pursuant to this statutory mandate, the CFTC has established position limits for the agricultural commodities traded on futures markets such as wheat, corn, oats, and soybeans. These position limits specify the maximum number of outstanding futures contracts that any single trader can hold at any particular time. For example, the CFTC has generally prohibited any single trader from holding more than 6,500 wheat futures contracts at any one time. Prior to 2005, the maximum number of contracts that could be held at any one time was 5,000 contracts.

Over the course of many years, the CFTC has made a number of decisions that have enabled certain index traders to hold more than the current limit of 6,500 wheat futures contracts. The first set of decisions resulted in the CFTC’s granting position limit exemptions to swap dealers selling commodity index swaps. Although the CEA directs the CFTC to impose trading limits to prevent excessive speculation, section 4a(c) of the Act also states that these limits are not to be applied to “transactions or positions which are shown to be bona fide hedging transactions or positions.” The CEA provides the CFTC with the discretion to define the term “bona fide hedging transaction” in order to “permit producers, purchasers, sellers, middlemen, and users of a commodity or a product derived therefrom to hedge their legitimate anticipated business needs for that period of time into the future for which an appropriate futures contract is open and available on an exchange.”

Initially, the CFTC limited the concept of a bona fide hedging transaction to transactions directly linked to the business needs of the producers, marketers, and users of a physical commodity in the cash market. But after Congress directed the CFTC, in 1986, to consider expanding its definition to include persons using the futures markets to manage risks associated with financial investment portfolios, the CFTC issued a series of clarifications and interpretations which, in effect, expanded the definition to include trading strategies to reduce financial risks, regardless of whether a matching transaction ever took place in a cash market for a physical commodity.

In 1991, using this expanded definition, the CFTC granted the first exemption from speculative trading limits to a swap dealer seeking to buy futures contracts to hedge its financial exposure to commodity index swaps it had sold to third parties. According to CFTC data provided to the Subcommittee, since 2005, the CFTC has issued four hedge exemptions to swap dealers seeking to buy wheat futures. Those exemptions permit the swap dealers to exceed the 6,500 position limit and hold up to 10,000, 17,500, 26,000, and 53,000 wheat futures contracts to hedge their exposures to commodity index swaps that reference wheat futures prices. In addition, in 2006, the CFTC staff took another step by issuing two “no-action” letters permitting the manager of one index-related exchange traded fund (ETF) to hold up to 11,000 wheat futures contracts and another fund manager to hold up to 13,000 wheat futures contracts.

Together, these hedge exemptions and no-action letters permit six index traders to hold a total of up to almost 130,000 wheat futures contracts at any one time. Absent these waivers from the position limits, these six index traders would have been limited to a total of about 39,000 wheat futures contracts at a time, or less than one-third of the contracts that they are now permitted to hold.

CFTC data indicates that, from 2006 to mid-2008, the total number of outstanding contracts (long open interest) attributable to commodity index traders in the wheat market was about 200,000 contracts. That means that the six index traders granted waivers from the trading limits may have held up to about 60 percent of all the outstanding wheat contracts held by index traders.

In directing the CFTC to consider granting position limit exemptions to firms using the futures markets to manage price risks associated with financial portfolios, Congress emphasized that the Commission's actions should remain consistent with its mandate to prevent excessive speculation from causing unreasonable or unwarranted changes in the prices of commodities traded on the futures exchanges. Because the large amount of index investments in the Chicago wheat futures market have been one of the major causes of "unreasonable or unwarranted" changes in wheat futures prices relative to cash prices, the granting of exemptions and waivers to index traders is inconsistent with the CFTC's statutory mandate to prevent excessive speculation on futures exchanges. Accordingly, the Report recommends that the CFTC no longer waive position limits for index traders and, in addition, begin an orderly phase-out of the existing waivers.

If the CFTC were to phase out the exemptions and waivers granted to index traders in the wheat market, those traders would become subject to the position limits for wheat futures contracts that generally apply and would be unable to hold more than 6,500 wheat contracts at any one time. The strict enforcement of the 6,500 contract limit should reduce the presence of index traders in the Chicago wheat futures market and help bring the futures market into better alignment with the cash market.

Restoring the 6,500 position limit to index traders may not, however, fully solve the pricing problems in the Chicago wheat futures market and eliminate the problems in the market exacerbated by excessive speculation. CFTC data indicates that at most 60% of the total outstanding wheat contracts (long open interest) which can be attributed to index investors would be affected by restoring the 6,500 limit. If pricing problems persist in the wheat market after the phase-out of these waivers, and after implementation of other actions being taken by the Chicago exchange, the CFTC should consider imposing additional restrictions on index traders to reduce their presence, such as by restoring the pre-2005 position limit of 5,000 wheat contracts per index trader to reduce their aggregate impact on wheat futures prices.

G. Other Commodities

The wheat market illustrates how a large amount of index trading on a futures exchange can significantly impair the ability of the futures market to perform its primary purposes—to enable commercial market participants, including farmers, grain elevators,

grain merchants, and consumers, to efficiently price their commodities and manage their price risks over time. The Subcommittee investigation was made possible in large part by the availability of data compiled by the CFTC on index trading in the wheat market. Comparable data on index trading in non-agricultural markets, including for crude oil, natural gas, and other energy commodities, is not presently available. The data problem is due in part to the complexity of the over-the-counter (OTC) energy market, the associated difficulty in tracing index trading in that market, and the difficulty in assessing the impact of OTC energy trades on regulated energy futures exchanges. To understand the role of index trading in energy and other non-agricultural commodity markets, the CFTC will need to improve its data collection and analysis efforts for both the OTC markets and index trading. Given the importance of this issue, despite the difficulties, the CFTC should undertake this effort to bring additional transparency to the impact of index trading on energy futures markets.

H. Findings and Recommendations

Based upon the Subcommittee's investigation, the Report makes the following findings of fact and recommendations to diminish or prevent excessive speculation in the wheat market.

Findings of Fact.

(1) **Excessive Speculation in Wheat.** The large number of wheat futures contracts purchased and held by commodity index traders on the Chicago futures exchange over the last five years constituted excessive speculation.

(a) **Index Traders Increased Futures Prices Relative to Cash Prices.**

The large number of wheat futures contracts purchased by index traders on the Chicago exchange created additional demand for those contracts and was a major contributing factor in the increasing difference between wheat futures prices and cash prices from 2006 to 2008.

(b) **Index Traders Impeded Price Convergence.** Over the past few years, the large number of Chicago wheat futures contracts purchased by index investors has been a major cause of the frequent failure of wheat futures and cash prices to converge upon contract expiration.

(c) **Unwarranted Price Changes.** The additional demand for Chicago wheat futures contracts attributable to commodity index traders contributed to "unreasonable fluctuations or unwarranted changes" in wheat futures prices, resulting in an abnormally large and persistent gap between wheat futures and cash prices (the basis). Largely as a result of index trading, the average difference between the cash and futures price at contract expiration rose from 13 cents per bushel in 2005, to 34 cents in 2006, to 60 cents in 2007, to \$1.53 in 2008, a tenfold increase in four years.

(d) **Undue Burden on Commerce.** The unwarranted changes in wheat prices resulting from the large amount of index trading in the Chicago wheat futures market created an undue burden on interstate commerce.

This undue burden was imposed on farmers, grain elevators, grain merchants, grain processors, and others by impeding useful hedging strategies, imposing significant unanticipated costs, and providing inaccurate indications of expected prices in the wheat markets.

(2) **CFTC Waivers Facilitated Excessive Speculation.** CFTC actions to waive position limits for commodity index traders facilitated excessive speculation in the Chicago wheat futures market. Waiving position limits for these index traders is inconsistent with the CFTC's statutory mandate to maintain position limits to prevent excessive speculation.

(3) **Inflated Futures Prices Affect Crop Insurance.** Because federal crop insurance, which is backed with taxpayer dollars, uses futures prices in its calculations, inflated futures prices can inflate insurance premiums, whose cost is shared by farmers and taxpayers, and impair the accuracy of the formulas used to determine the payouts to farmers, resulting in either overpayments or underpayments.

(4) **Poor Data Impedes Analysis.** There is a lack of adequate data on the number of futures contracts purchased by commodity index traders for non-agricultural commodities like crude oil. Improved data is essential to analyze the extent to which index traders may be contributing to higher futures prices and excessive speculation in crude oil and other markets.

Recommendations.

(1) **Phase Out Existing Wheat Waivers for Index Traders.** The CFTC should phase out existing waivers, granted through exemptions or no-action letters, which permit commodity index traders to exceed the standard limit of 6,500 wheat contracts per trader at any one time, and re-apply the standard position limit designed to prevent excessive speculation in the wheat market.

(2) **Take Further Action If Necessary.** If pricing problems in the Chicago exchange persist after the phase-out of index trader waivers and after implementation of other actions being taken by the Chicago exchange, the CFTC should consider imposing additional restrictions on commodity index traders to reduce excessive speculation, such as by imposing a position limit of 5,000 wheat contracts per index trader.

(3) **Analyze Other Agricultural Commodities.** The CFTC should undertake an analysis of other agricultural commodities to determine whether commodity index traders have increased futures prices compared to cash prices or caused price convergence problems, and whether position limit waivers for index traders should be phased out to eliminate excessive speculation.

(4) **Strengthen Data Collection for Non-Agricultural Commodities.** The CFTC should develop reliable data on the extent to which commodity index traders purchase non-agricultural commodity futures contracts, especially crude oil and other energy commodities. Once this data is collected, the CFTC should

evaluate the impact of index trading in these markets, and whether position limits for index traders should be phased out to eliminate excessive speculation.

The following sections of this Report present detailed information on how, in recent years, the high level of commodity index trading in the wheat market constituted excessive speculation. Section II describes the wheat futures and cash markets, and recent pricing trends that have caused turmoil among wheat producers, merchants, and consumers. Section III provides general information about hedging and speculation in the commodity markets, and why price convergence is important to commercial users of the wheat market. Section IV explains how commodity index trading works, its impact on the futures markets, and how the CFTC has facilitated index trading by waiving position limits for wheat and other agricultural commodities. Section V details the evidence indicating how commodity index trading has been one of the major causes of unwarranted price fluctuations and an undue burden on interstate commerce, and thereby constituted excessive speculation in the wheat market. Section VI describes how inflated futures prices affect the federal crop insurance program.