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United States Government Accountability Office
Washington, DC 20548

January 30, 2009

The Honorable Collin Peterson
Chairman
Committee on Agriculture
House of Representatives

Subject: *Issues Involving the Use of the Futures Markets to Invest in Commodity Indexes*

Until mid-2008, prices for a broad range of physical commodities, from crude oil to crops such as wheat, had increased dramatically for several years—raising concerns and leading to a debate over the possible causes. Some market participants and observers have attributed the price increases to fundamental economic factors related to supply and demand. Others have suggested that the price increases resulted from speculation in the futures contracts by hedge funds and investors in commodity indexes. Like stock indexes, commodity indexes track the composite price of a basket of long futures positions in physical commodities.¹ The indexes' investment strategy is passive, remaining the same regardless of whether prices are falling, rising, or flat. Two commonly referenced commodity indexes are the Standard & Poor's Goldman Sachs Commodity Index (S&P GSCI) and Dow Jones-American International Group Commodity Index (DJ-AIGCI), which are based on a broad range of physical commodities, including energy products, agricultural products, and metals. Since around the mid-2000s, pension plans, endowments, and other institutional investors increasingly have used investments in commodity indexes to obtain exposure to commodity prices as an asset class, typically to diversify their portfolios or hedge inflation risk.²

Your letter asked us to examine various issues surrounding how commodity-index futures trading is addressed by various laws and regulations. Futures exchange regulations that can affect such trading include margins, or performance bonds,

¹A futures contract is an agreement to purchase or sell a commodity for delivery in the future. A long futures position is one in which the holder has bought a futures contract and is obligated to take delivery of the commodity in the future. However, few contracts actually result in delivery, because the vast majority of contracts are offset by making an equal but opposite trade before the delivery date.

²Inflation risk is the risk associated with the return from an investment not covering the loss in purchasing power caused by inflation.

which are deposits that futures traders make with their broker to ensure that they can meet the financial obligations associated with their futures positions. To prevent excessive speculation that could cause unwarranted changes in futures prices, the Commodity Futures Trading Commission (CFTC) and futures exchanges place limits on the size of futures positions—the number of contracts—that a trader may hold. In agreement with your office, this report addresses

- whether the federal law governing futures trading prohibits investors from using the futures markets to gain an exposure to commodity indexes,
- whether the federal law governing pension plans prohibits them from investing in commodities through the futures markets,
- how margins have affected the ability of investors to obtain exposures to commodity indexes, and
- how position limits have affected the ability of investors to obtain exposures to commodity indexes.

In addition, we agreed with your office to review recent studies analyzing the effect of commodity index futures trading on commodity prices.

On December 16, 2008, we briefed your office on the results of this work. This letter summarizes the briefing. The enclosures contain the full briefing, including our scope and methodology, and a bibliography of the studies we reviewed. In response to questions asked during the briefing, we have added information to the enclosed briefing slides to provide additional details on the percentage of total outstanding futures positions accounted for by index traders, the scope and nature of contract position limit exemptions, and the scope of the federal law covering pension funds.

We conducted this performance audit from September 2008 through January 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Since around mid-2000s, institutional and retail investment in commodities has grown significantly. However, determining the actual amount of such investment is difficult, in part because no comprehensive data are available on all such investments. Based on recently collected data, CFTC estimated that the aggregate net amount of all commodity index trading (combined over-the-counter (OTC) and exchange-traded derivatives) was \$200 billion as of June 30, 2008, of which \$161

billion was tied to commodities traded on U.S. futures markets and the remainder was tied to commodities traded on foreign futures markets.

To gain exposure to a commodity index, investors can take a direct approach by taking long positions in the individual futures contracts making up the index. Investors also can take long positions in futures contracts linked to a commodity index, such as futures on the S&P GCSI or DJ-AIGCI. Some investors may find the direct approach to be difficult, however, because of the need to roll over their futures positions periodically.³ As an alternative, investors can gain exposure to a commodity index by using a swap dealer (e.g., large bank) to enter into an over-the-counter (OTC) swap linked to an index.⁴ In addition, investors can gain exposure to a commodity index by investing in other vehicles that track a commodity index, such as a commodity pool, mutual fund, or exchange-traded fund or note.

To regulate commodity futures and option markets in the United States, Congress created CFTC as an independent agency in 1974. Under the Commodity Exchange Act (CEA), the primary mission of CFTC includes fostering open, competitive, and financially sound futures markets and protecting market users and the public from fraud, manipulation, and abusive practices related to the sale of commodity futures and options.⁵ This mission is achieved through a regulatory scheme that is based on federal oversight of industry self-regulation. Prompted partly by the growth of the OTC derivatives markets, the Commodity Futures Modernization Act of 2000 amended CEA to provide, among other things, for regulated markets and markets largely exempt from regulation. The regulated markets include futures exchanges that have self-regulatory surveillance and monitoring responsibilities as self-regulatory organizations and also are subject to oversight by CFTC.

Summary

Although the use of the futures markets by institutional investors to gain long-term exposure to commodities represents a new type of speculation, the CEA—the law governing futures trading—does not prohibit this activity. Futures markets historically have been used by commercial firms to manage price risk and speculators to profit from price movements. In a regulatory response to some funds that sought approval to conduct investing in commodity indexes, CFTC staff noted that the use of the futures markets by funds to provide their investors with a commodity-index exposure represented a legitimate and potentially useful investment strategy.

³Unlike a passive portfolio of stocks, a passive futures portfolio requires regular transactions because futures contracts expire. For example, in the case of the S&P GCSI, futures contracts near to expiration are rolled forward (i.e., exchanged for futures contracts with the next applicable expiration date) at the beginning of their expiration months.

⁴For example, under a typical commodity index swap, the investor agrees to pay the Treasury bill rate, plus a management fee, to a swap dealer, and the dealer agrees to pay the total return of a specified commodity index, such as the S&P GCSI or DJ-AIGCI, to the investor.

⁵See section 3 of the Commodity Exchange Act, 7 U.S.C. § 5 (2004).

Under the federal law governing private pension plans—the Employee Retirement Income Security Act (ERISA)—such plans may invest in commodity indexes using futures contracts or other derivatives but must determine that such investments are, among other things, prudent. Although ERISA does not prohibit pension plans from investing in futures, it sets certain minimum standards for pension plans sponsored by private employers.⁶ A 1996 opinion issued by the Department of Labor recognized that derivatives might be a useful tool for managing a variety of risks and broadening investment alternatives in a plan’s portfolio. But the opinion also noted that investments in certain derivatives might require a higher degree of sophistication and understanding on the part of plan fiduciaries than other investments.

Commodity index investors generally have not been directly subject to futures margins (or performance bonds), because they primarily have used OTC swaps, not futures contracts, to obtain their exposure. Instead, the swap dealers that provide commodity index exposures to investors through swaps are subject to futures margins if they use exchange-traded futures to hedge their risk exposure from these swaps. Moreover, such dealers may have entered into other OTC transactions that offset their index exposures and, as a result, may not use futures to hedge their index exposures in full. Futures exchanges, not CFTC, generally set margins, which are based on the price volatility of the underlying commodity of a futures contract and typically are small relative to a contract’s market value. Both the buyer and seller of a futures contract post margin, which serves to ensure that they can meet their contractual obligations; moreover, futures margin is not an extension of credit. If margin requirements on index-related futures were increased, two of the largest swap dealers told us that the cost of providing investors with commodity index exposures using OTC swaps would increase and might lead investors to use alternatives to OTC swaps, such as commodity index funds. They also said that once institutional investors have decided to allocate a portion of their portfolios to commodities, they will choose the most efficient way to do so. According to the market participants we spoke with, imposing higher margins on index-related futures positions also could raise challenges. For example, swap dealers use futures to hedge their net exposure—the residual risk remaining after a dealer internally nets OTC swaps with offsetting exposures—and may not be able to untangle and identify the futures positions that are attributable specifically to commodity index swaps.

Similarly, index investors largely have not been restricted by contract position limits that are used to prevent excessive speculation in the futures markets. Such investors primarily have obtained their index exposures through OTC swaps that are not subject to futures speculative position limits. Further, swap dealers have

⁶Among other things, ERISA (1) requires plans to provide information to participants and the federal government about the plan, (2) sets minimum standards regarding who may participate and when they may participate, (3) sets responsibility standards and requires accountability for people who run or provide investment advice to plans, (4) guarantees payment of certain benefits if a defined benefit plan is terminated without sufficient assets to pay accumulated benefits, and (5) gives the Secretary of Labor the authority to bring legal actions to enforce title I of ERISA.

received exemptions from CFTC that allow them to hold index-related futures positions in excess of speculative position limits.⁷ Position limits prohibit traders from holding a futures position above a specified limit, unless the traders have received an exemption. With an exemption, a swap dealer can enable an investor to use an OTC swap to take a position that is greater than the level the investor would be permitted to take if the position were held solely in the futures market. The swap dealer can, then, take a futures position in excess of a position limit to hedge its exposure from the OTC swap. In a September 2008 report, CFTC noted that the mix of commercial and noncommercial activity by swap dealers called into question whether the swap dealers should receive hedge exemptions from position limits for some of their activity. In that regard, the CFTC Commission instructed the agency's staff to develop a proposed rulemaking that would address whether the swap dealers should receive a more limited exemption. CFTC staff told us that the Commission has not set a time frame for issuing the proposal.

Although not included in the enclosed briefing slides, we also are providing information on the results of our review of studies analyzing the impact that index traders and other futures speculators have had on commodity prices. Through our literature search, we identified eight empirical studies and three qualitative studies. (See the bibliography for a list of the studies we reviewed.) Unlike the empirical studies, the qualitative studies do not use experimental or statistical controls to evaluate the causal relationship between speculative trading and commodity prices and, thus, do not provide a systematic way to assess the empirical veracity of the causal relationship. Importantly, the eight empirical studies we reviewed generally found limited statistical evidence of a causal relationship between speculation in the futures markets and changes in commodity prices—regardless of whether the studies focused on index traders, specifically, or speculators, generally. Four of the studies used CFTC's publicly available Commitments of Traders (COT) data in their analysis, and their findings should not be viewed as definitive because of limitations in that data. For example, the public COT data are issued weekly, and analyses using such data could miss the effect of daily or intraday changes in futures positions on prices. Also, these data generally aggregate positions held by different groups of traders and, thus, do not allow the effect of individual trader group positions on prices to be assessed. Two of the studies we reviewed involved CFTC staff and used non-public COT data that included positions reported more frequently and separated positions held by different trader groups.⁸ However, similar to the studies that used the public COT data, the studies using the non-public data also found limited evidence that speculation was affecting commodity prices. In addition, all of the empirical studies we reviewed generally employed statistical techniques that were designed to detect a very weak or even spurious

⁷CFTC speculative position limits apply only to certain "designated" agricultural commodities listed in CFTC Regulation 150.2. CFTC regulations list certain types of positions that may be exempted from (and thus may exceed) these speculative position limits. The exemptions include bona fide hedging transactions or positions.

⁸These studies, while not addressing all the data limitations, provide for a better evaluation of the causal relationship between positions and commodity prices.

causal relationship between futures speculators and commodity prices. As result, the fact that the studies generally did not find statistical evidence of such a relationship appears to suggest that such trading is not significantly affecting commodity prices at the weekly or daily frequency.

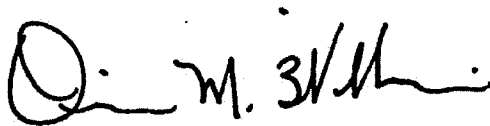
Agency Comments

We provided a draft of this letter and the attached briefing to CFTC for comment. CFTC provided technical comments, which we incorporated as appropriate.

As we agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from the date of this letter. At that time, we will provide copies of this report to interested congressional committees. We also are sending a copy of this report to the Acting Chairman of CFTC. In addition, this report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512- 8678 or williamso@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in enclosure II.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Orice M. Williams". The signature is fluid and cursive, with a large initial "O" and "M".

Orice M. Williams
Director, Financial Markets and Community Investment