

**Written Testimony of
Jeffrey Harris, Chief Economist
Before the
Committee on Energy and Natural Resources
United States Senate
April 3, 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). I appreciate the opportunity to discuss the CFTC's role with respect to the crude oil futures 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. To do this, the Commission employs a highly-skilled staff who work to oversee the markets and address any suspicious or illegal market activity.

The Commodity Exchange Act (CEA or Act) grants the Commission exclusive jurisdiction with respect to, among other things, accounts, agreements, and transactions involving commodity futures and options contracts that are required to be traded or executed on an exchange or a designated contract market, also known as a DCM. DCMs are regulated futures exchanges that are self-regulatory organizations (SROs) subject to comprehensive oversight by the CFTC. DCMs can list for trading any type of contract, they can permit intermediation, and all types of traders (including retail traders) are permitted to participate in their markets.

The CFTC has been overseeing the U.S. futures industry under principles-based regulation since the passage of the Commodity Futures Modernization Act (CFMA) in 2000. A principles-based system requires markets to meet certain public outcomes in conducting their business operations. For example, DCMs must continuously meet 18 core principles—ranging from maintaining adequate financial safeguards to conducting market surveillance—in order to uphold their good standing as a regulated contract market.

Market Oversight

The CFTC's Division of Market Oversight (DMO) is responsible for monitoring and evaluating a DCM's operations. DMO conducts market surveillance of all activity on DCMs. While operational, DCMs must establish and devote resources toward an effective oversight program, which includes surveillance of all activity on their markets to detect and deter manipulation and trading abuses. The CFTC routinely assesses the regulatory and oversight activities of DCMs through regularly scheduled examinations of DCMs' self-regulatory programs. The Commission currently regulates DCMs located in New York, Chicago, Kansas City, and Minneapolis.

The CFTC's market surveillance mission regarding DCM activity is to ensure market integrity and customer protection in the futures markets. Traders establishing positions on DCMs are subject to reporting requirements so that CFTC staff and the DCM can evaluate position sizes to detect and prevent manipulation. In addition, trade practice surveillance involves compilation and monitoring of transactional-level data by the Commission and the DCM to protect market participants from abusive trading such as wash sales, money laundering and trading ahead of customers.

A key market surveillance mission is to identify situations that could pose a threat of manipulation and to initiate appropriate preventive actions. Each day, for the estimated 1,400 active futures and option contracts in the U.S., the CFTC market surveillance staff monitors the activities of large traders, key price relationships, and relevant supply and demand factors to ensure market integrity.

Surveillance economists routinely examine trading in futures and options contracts that are approaching their expiration periods for any unusual trading patterns or anomalies. Regional surveillance supervisors immediately review unusual trading or anomalies to determine whether further action is warranted. Surveillance staff advise the Commissioners and senior staff of significant market developments as they occur and also conduct weekly surveillance meetings (non-public, closed meetings) so that the Commission will be prepared to take action if necessary. In addition to the transparency provided to the CFTC by position reporting by large traders, the Commission provides a degree of transparency to the public by publishing aggregate information in the CFTC's weekly Commitment of Traders Report.

As noted, surveillance of DCM trading is not conducted exclusively by the Commission. As SROs, DCMs have significant statutory surveillance responsibilities. Typically, however, surveillance issues are handled jointly by Commission staff and the relevant DCM. The Commission, while continuing to monitor market events, typically permits the DCM, as the front-line regulator, to utilize its self-regulatory authorities to resolve issues arising in its markets. If a DCM fails to take actions that the Commission deems

appropriate, however, the Commission has broad emergency powers under the CEA to order the DCM to take specific actions. The Commission has exercised its emergency authority four times in its history.

Financial Oversight

The Commission's Division of Clearing and Intermediary Oversight (DCIO) is responsible for and plays an integral role in ensuring the financial integrity of all transactions on CFTC-regulated markets. DCIO's most important function is to prevent systemic risk and ensure the safety of customer funds. DCIO meets these responsibilities through an oversight program that includes the following elements: (1) conducting risk-based oversight and examinations of industry SROs responsible for overseeing Futures Commission Merchants (FCMs), commodity trading advisors, commodity pool operators, and introducing brokers, to evaluate their compliance programs with respect to requirements concerning fitness, net capital, segregation of customer funds, disclosure, sales practices, and related reporting and recordkeeping; (2) conducting risk-based oversight and examinations of all Commission-registered derivatives clearing organizations (DCOs) to evaluate their compliance with core principles, including their financial resources, risk management, default procedures, protections for customer funds, and system safeguards; (3) conducting financial and risk surveillance oversight of market intermediaries to monitor compliance with the provisions of the CEA and Commission regulations; (4) monitoring market events and conditions to evaluate their potential impact on DCOs and the clearing and settlement system and to follow-up on indications of financial instability; and (5) developing regulations, orders, guidelines, and other regulatory approaches applicable to DCOs, market intermediaries, and their SROs. Collectively, these functions serve to protect market users, the general public and producers; to govern the activities of market participants; and to enhance the efficiency and effectiveness of the futures markets as risk management mechanisms.

The DCOs that the Commission currently regulates are located in New York, Chicago, Kansas City, Minneapolis and London, England. The intermediaries overseen by the Commission are located throughout the United States and in various other countries.

Enforcement

In Section 3 of the CEA, Congress provided that transactions subject to the Act "are affected with a national public interest" because they constitute "a means for managing and assuming price risks, discovering prices, or disseminating pricing information through trading in liquid, fair and financially secure trading facilities." The Commission's Division of Enforcement (Enforcement) is responsible for prosecuting fraudulent, abusive and manipulative trading practices. Enforcement has a substantial role over maintenance and protection of principles of fairness and integrity in commodity

markets. At any one time, Enforcement's investigations (which are non-public) and pending litigation involve, on average, approximately 750 individuals and corporations.

In protecting the national public interest associated with transactions subject to the Act, the Commission has broad authority to investigate and prosecute misconduct occurring in both the futures and cash markets. Included in this broad authority is Section 9(a)(2) of the CEA which prohibits manipulating or attempting to manipulate the price of any commodity in interstate commerce or for future delivery, cornering or attempting to corner any such commodity, and knowingly delivering or causing to be delivered false or misleading or knowingly inaccurate reports of crop or market information that affects or tends to affect the price of any commodity in interstate commerce.

During the last five years, Enforcement has maintained a record level of investigations and prosecutions in nearly all market areas, including attempted manipulation, 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. Working closely with the President's Corporate Fraud Task Force, Enforcement is staffed with skilled professionals who prosecute cases involving on-exchange transactions and, to the extent of the Commission's jurisdiction, complex over-the-counter (OTC) transactions as well. 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 obtained more than 2 billion dollars in monetary sanctions, which include civil monetary penalties and orders to pay restitution and disgorgement.

In the energy sector, from December 2001 through the present, Enforcement investigated or prosecuted Enron and BP, dozens of other energy companies, and more than one hundred energy traders (including a pending action against Amaranth). With respect to crude oil in particular, Enforcement staff in August 2007 announced a settlement for a charge of attempted manipulation in OTC crude oil markets against Marathon Petroleum Company, a subsidiary of Marathon Oil Corporation (Marathon Petroleum). In that action, which imposed a \$1 million civil monetary penalty, the Commission entered an Order finding that Marathon Petroleum attempted to manipulate a price of spot cash West Texas Intermediate (WTI) crude oil by attempting to influence downward the Platts market assessment for spot cash WTI on November 26, 2003. The Platts market assessment for WTI is used as the price of crude oil in certain domestic and foreign transactions. At the time in question, Marathon Petroleum priced approximately 7.3 million barrels of physical crude per month off the Platts market assessment for WTI.

Crude Oil Trading on Futures Markets and Other Markets

The Commission's oversight of oil futures trading focuses on the New York Mercantile Exchange or (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. (Notably, crude oil futures products are also traded on some Exempt Commercial Markets, but those contracts are fairly low in trading volume.)

NYMEX is a DCM with self-regulatory responsibilities and operates under the Commission's oversight as provided by the CEA. NYMEX lists several crude oil futures contracts. The exchange's highest volume crude oil contract is the WTI Light Sweet Crude Oil futures contract, which provides for physical delivery of oil in Cushing, OK. NYMEX's Light Sweet Crude contract traded a volume of 122 million futures contracts in 2007. NYMEX also lists several cash settled futures contracts based on the Light Sweet Crude Oil futures contract price. NYMEX also lists futures contracts based on Brent blend crude oil, which settle on the price of the ICE Futures Europe Brent contract, as well as a Dubai crude oil calendar swap contract. In addition, NYMEX offers several financially-settled, cleared contracts, including differential and spread contracts involving prices of the WTI, Brent and Dubai crude oil futures contracts.

ICE Futures Europe lists a Brent Crude Oil futures contract, a WTI Crude Oil futures contract that settles on the price of the NYMEX light sweet crude oil contract, and a Middle Eastern Sour Crude futures contract. The Brent and WTI contracts are very actively traded, while the Middle Eastern Sour Crude contract trades much less frequently.

ICE Futures Europe is a UK Registered Investment Exchange and is regulated by the UK's Financial Services Authority (FSA). The U.S.-based members of ICE Futures Europe were granted permission by Commission staff to directly access the Exchange's trading system from the U.S. pursuant to a Commission no-action letter issued to ICE Futures Europe's predecessor, the International Petroleum Exchange Limited, on November 12, 1999, as amended.

Pursuant to the no-action letter's terms and conditions and information-sharing arrangements, CFTC surveillance staff knows, among other things, when ICE Futures Europe proposes to list new contracts to be made available from the U.S., the volume of trading originating from the U.S., the identities of members who have direct access to the trading system in the U.S., and when there are material changes to any aspect of the information provided that resulted in the issuance of the no-action letter. Pursuant to CFTC-FSA information-sharing arrangements, CFTC surveillance staff also receives ICE Futures Europe's member position reports for its WTI Crude Oil futures contract on

a weekly basis (daily during the week prior to contract expiration). Thus, CFTC surveillance staff knows the positions and identities of members/customers who meet or exceed position-reporting requirement levels in the ICE Futures Europe WTI contract, and can consider that data along with the large trader reporting information that it receives from NYMEX for its counterpart contract.

Foreign Boards of Trade

The CFTC employs a “no-action” process when foreign boards of trade (FBOTs) seek to provide electronic screen access to the U.S., but without registering as a DCM. With the advent of the ICE Futures Europe WTI contract in 2006, the CFTC undertook a thorough review of its FBOT policy. The Commission concluded that the best way to handle the issue was to continue its no-action approach, a response that reflects the internationally accepted “mutual recognition” approach used by regulators in many developed market jurisdictions to govern access to foreign electronic exchanges by persons located in their jurisdictions. This approach generally is based upon a review of, and ongoing reliance upon, the foreign market’s “home” regulatory regime, and is designed to maintain a threshold level of regulatory protections while avoiding the imposition of duplicative regulation.

The CFTC has followed the no-action approach since 1996 and it has never experienced any market integrity or customer protection problems. The no-action procedure provides the CFTC with flexibility in dealing with the particular foreign exchanges and different CFTC practices. The Commission held an FBOT hearing in June 2006, including a related open public comment opportunity, during which market users, foreign exchanges and even competitive domestic exchanges that compete with FBOTs overwhelmingly confirmed the success of the CFTC’s approach in terms of market and customer protection and access to additional products. Subsequently, the CFTC issued a Statement of Policy re-affirming the use of the FBOT no-action process, but also enhancing it through the imposition of information-sharing conditions where no-action relief is sought for FBOT contracts that could adversely affect the pricing of contracts traded either on a DCM or on any cash market for commodities subject to the CEA.

On November 17, 2006, the CFTC and the UK FSA signed a Memorandum of Understanding (MOU) concerning consultation, cooperation and the exchange of information related to market oversight. The MOU established a framework for the CFTC and FSA to share information that the respective authorities need to detect potential abusive or manipulative trading practices that involve trading in related contracts on U.S. and UK derivative exchanges. Since the adoption of the MOU, the CFTC and FSA have been holding monthly conference calls to discuss matters of mutual interest including trading on ICE Futures Europe. Commission staff has found that the

MOU has strengthened information-sharing on an ongoing basis between the two regulatory authorities.

Exempt Commercial Markets

In the Commodity Futures Modernization Act of 2000 (CFMA), Congress enacted special provisions in the CEA to govern Exempt Commercial Markets (ECMs), which are electronic marketplaces for commercial participants to trade contracts in energy and certain other commodities. ECMs have been evolving over time since then, such that today, certain ECM contract settlement prices link to DCM futures contract settlement prices. Linkage of contract settlement prices was not something that was contemplated at the time of the CFMA.

Last September, the CFTC conducted an extensive public hearing on ECMs, and found that certain energy futures contracts traded on ECMs may be serving a significant price discovery function. This raised the question of whether the CFTC has the necessary authority to police the ECM markets for manipulation and abuse. The Commission concluded that changes to the CEA would be appropriate as a result and, to that end, in October 2007 the Commission recommended legislative changes in a Report delivered to Congress. Specifically, the Commission recommended that significant price discovery contracts on ECMs be subject to the same position limit and position accountability core principle that applies to contracts traded on DCMs. In addition, its recommendations would further require: 1) large trader position reporting on significant price discovery contracts on ECMs; 2) self-regulatory responsibilities for the ECM; and 3) CFTC emergency authority over these contracts.

We are pleased that the Commission's recommendations were endorsed by the President's Working Group on Financial Markets, and have been well received in Congress. In December, these recommendations were included in legislation that moved forward in both the House of Representatives and the Senate. Both bills largely adopt the CFTC's recommendations on the need for enhanced oversight over significant price discovery contracts traded on ECMs, including position limits and position accountability. The modest differences between the bills are being worked out as part of the Conference on the Farm Bill, and we are hopeful that Congress will take final action on these proposals soon to give the CFTC these additional and necessary authorities.

Bilateral Over-the-Counter Trading

Much crude oil trading also takes place by what is known as "over-the-counter" (OTC) trading. This trading is typically non-standardized and between two sophisticated participants. The CFTC does not regulate privately-negotiated OTC contracts, nor does it regulate cash markets or forward markets. However, we have the tools to adequately

police the markets falling under CFTC jurisdiction. The typical OTC market transaction involves a sophisticated market participant's request to a swap dealer to structure an OTC transaction. The dealer facilitates the customer by taking the opposite side of the customer's position. The dealer then turns to the futures markets to offset the risk that it has taken on. (We see the actions of OTC dealers in our Large Trader Reporting System as explained below.)

The first thing to recognize about OTC contracts is that they are typically benchmarked to NYMEX futures prices or to cash market indexes. In terms of administering the anti-manipulation provisions of the CEA, our current authority and our current surveillance program are sufficient to detect an attempted manipulation of the NYMEX futures price to benefit an off-exchange OTC position.

Our current authority also gives us the ability to ask what we call "reportable traders" in the futures markets to reveal their OTC positions, as well as their cash market and forward market positions. If required, we also have subpoena authority. We have used this authority to help bring 50 enforcement actions in energy markets in recent years.

The enactment of the CFMA brought about multilateral clearing of OTC positions at futures clearinghouses. As a result, OTC trades become transparent to the CFTC through the clearing process. For 2007, approximately 224 million OTC contracts cleared through NYMEX and the InterContinental Exchange (ICE). In fact, as traders in the OTC markets have become more aware of credit considerations and the benefits of transparency, they have been moving their positions onto exchanges where the exchange clearinghouse enhances creditworthiness and the market is transparent.

Using Data to Oversee the Markets

The CFTC receives millions of data points every day about trading activity in the markets. The agency's Large Trader Reporting System is the cornerstone of our surveillance system and is used to look at data. Clearing members, FCMs, foreign brokers and other traders file confidential electronic reports with the CFTC each day, reporting positions of each large trader on each DCM. In the NYMEX WTI contract, for instance, 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 remainder being smaller traders who do not meet reporting thresholds.

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.” However, to ensure that traders are classified consistently and with utmost accuracy, CFTC market surveillance staff checks the forms and re-classifies the trader if they have further information about the trader’s involvement with the markets.

In fact, a reportable participant may be classified at the CFTC as non-commercial in one market and commercial in another market, but is never classified as both in the same market. For instance, a financial institution trading Treasury Notes might have a money management unit whose trading positions are classified as non-commercial but a banking unit that is classified as commercial. Reporting firms must file Form 102 to identify each account, and this information allows the CFTC to relate separate traders to a single higher level of ownership.

In addition to the breakdown between commercial and non-commercial categories, 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 institutions, ranging from agricultural merchants and livestock feeders to mortgage originators. Traders that are non-commercial include commodity trading advisors, commodity pool operators (managed money traders), and floor brokers and traders.

Using data from the Large Trader Reporting System, the CFTC also publishes a weekly breakdown of reporting positions of each Tuesday’s open interest known as the Commitments of Traders (COT) report. COT reports are published for markets in which 20 or more traders hold positions above CFTC-established reporting levels.

COT reports are available on the CFTC’s public website every Friday at 3:30 PM in both a short and long format. The short report shows open interest separately by reportable and non-reportable positions. The long report, in addition to the information in the short report, shows the concentration of positions held by the largest four and eight traders and groups the data by crop year, where appropriate. For reportable positions, additional data is provided for commercial and non-commercial holdings, spreading, changes from the previous report, percentage of open interest by category, and numbers of traders.

Speculation in the Commodities Markets

The current market environment has brought questions about the role that speculators play in affecting prices 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, speculators, as a class, provide the market liquidity to allow hedgers to manage various commercial risks. Unnecessary limitations on the amount of speculation that an individual or entity may engage in could limit the amount of liquidity

in the marketplace, the ability of hedgers to manage risks, and the information flow into the marketplace, which could in turn negatively affect the price discovery process and the hedging function of the marketplace.

While speculation is critical to well-functioning markets, 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 specifically makes it a violation of the Act to manipulate the price of a commodity in interstate commerce or for future delivery. 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. 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. Moreover, CEA Section 5(d)(5) requires that a DCM, “[t]o reduce the potential threat of market manipulation or congestion, especially during trading in the delivery month . . . shall adopt position limitations or position accountability for speculators, where necessary and appropriate.”

All agricultural and natural resource futures and options contracts are subject to either Commission or exchange spot month speculative position limits – and many financial futures and options are as well. With respect to such exchange spot month speculative position limits, the Commission’s guidance specifies that DCMs should adopt a spot month limit of no more than one-fourth of the estimated spot month deliverable supply, calculated separately for each contract month. For cash settled contracts, the spot month limit should be no greater than necessary to minimize the potential for manipulation or distortion of the contract’s or underlying commodity’s price.

With respect to trading outside the spot month, the Commission typically does not require speculative position limits. Under the Commission’s guidance, an exchange may replace position limits with position accountability for contracts on financial instruments, intangible commodities, or certain tangible commodities. If a market has accountability rules, a trader – whether speculating or hedging – is not subject to a specific limit. Once a trader reaches a preset accountability level, however, the trader must provide information about his position upon request by the exchange. In addition, position accountability rules provide an exchange with authority to restrict a trader from increasing his or her position.

Finally, in order to achieve the purposes of the speculative position limits, the Commission and the DCMs treat multiple positions held on a DCM's market that are subject to common ownership or control as if they were held by a single trader. Accounts are considered to be under common ownership if there is a 10 percent or greater financial interest. The rules are applied in a manner calculated to aggregate related accounts.

Violations of exchange-set or Commission-set limits are subject to disciplinary action, and the Commission, or a DCM, may institute enforcement action against violations of exchange speculative limit rules that have been approved by the Commission. To this end, the Commission approves all position limit rules, including those for contracts that have been self-certified by a DCM.

Office of the Chief Economist Study of Trends in the Crude Oil Market

The CFTC's Office of the Chief Economist (OCE) closely tracks developments in the crude oil markets. Crude oil prices have risen significantly during the past few years and are currently above \$100/barrel. Concurrently, open interest in WTI crude oil futures has expanded dramatically, growing from about 1 million contracts in 2004 to more than 2.8 million contracts during the most recent week.

OCE has studied these markets to better understand the components of this rapid growth. Our studies find three major trends in crude oil markets. First, we see similar rates of growth for both commercial and non-commercial interests. Non-commercial participants are commonly considered speculators. Non-commercial share of total open interest has increased marginally from 31% to about 37% 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.

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. In fact, contracts beyond six years are now available at NYMEX. Figures 1a and 1b below highlight these two trends.

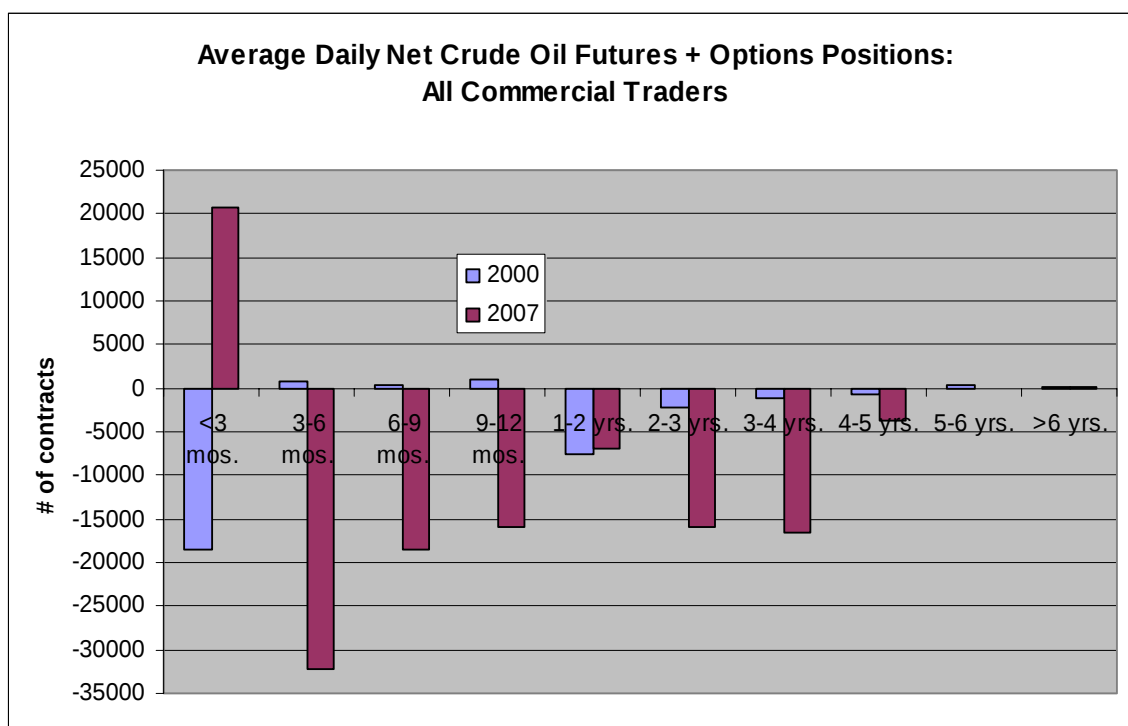


Figure 1a – Trends in Commercial Trader Open Interest

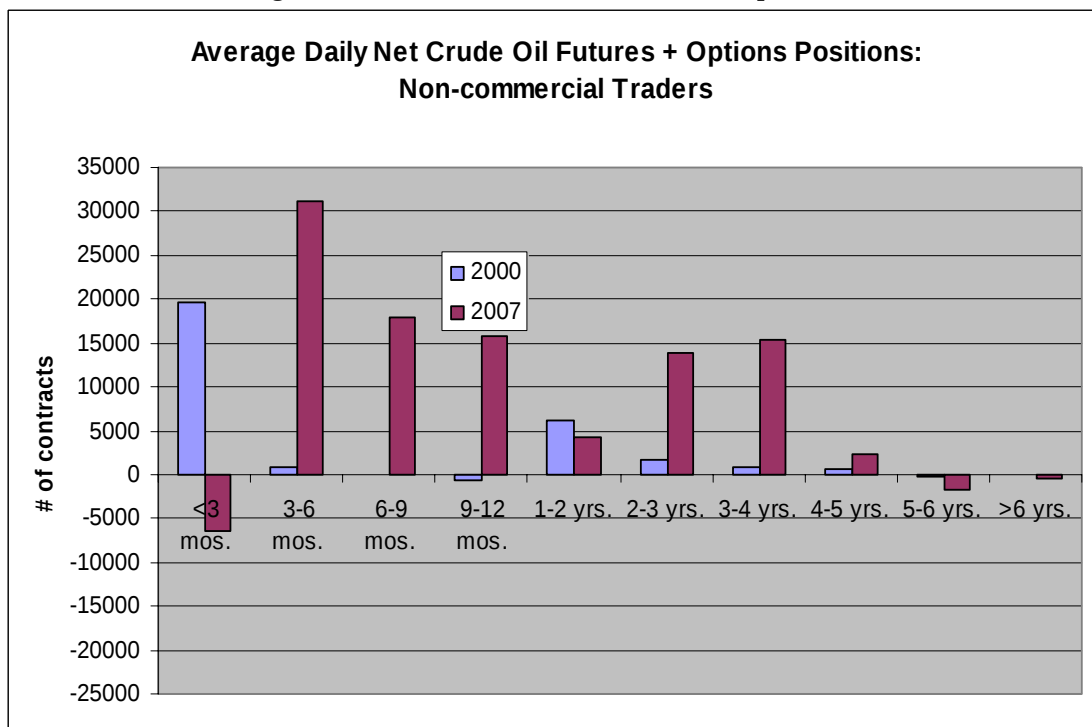


Figure 1b – Trends in Non-Commercial Trader Open Interest

Figures 1a and 1b also highlight the fact that commercial traders taking short positions to hedge rely on non-commercial traders to take the opposite side of their trades. Were fewer non-commercial positions opened, hedging costs would likely increase. In this light, commercial traders demand hedging services that are supplied by non-commercial

traders. 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. These dealers, who take the short sides of over-the-counter swaps against commodity index traders, hedge this exposure with long futures positions in crude oil. This development has altered the traditional role of commercial traders. Previously, commercial traders predominately hedged long cash positions using short futures contracts. The recent development has swap dealers (also classified as commercial traders) hedging their short swap positions with long futures. Figures 2a and 2b below depict these differences.

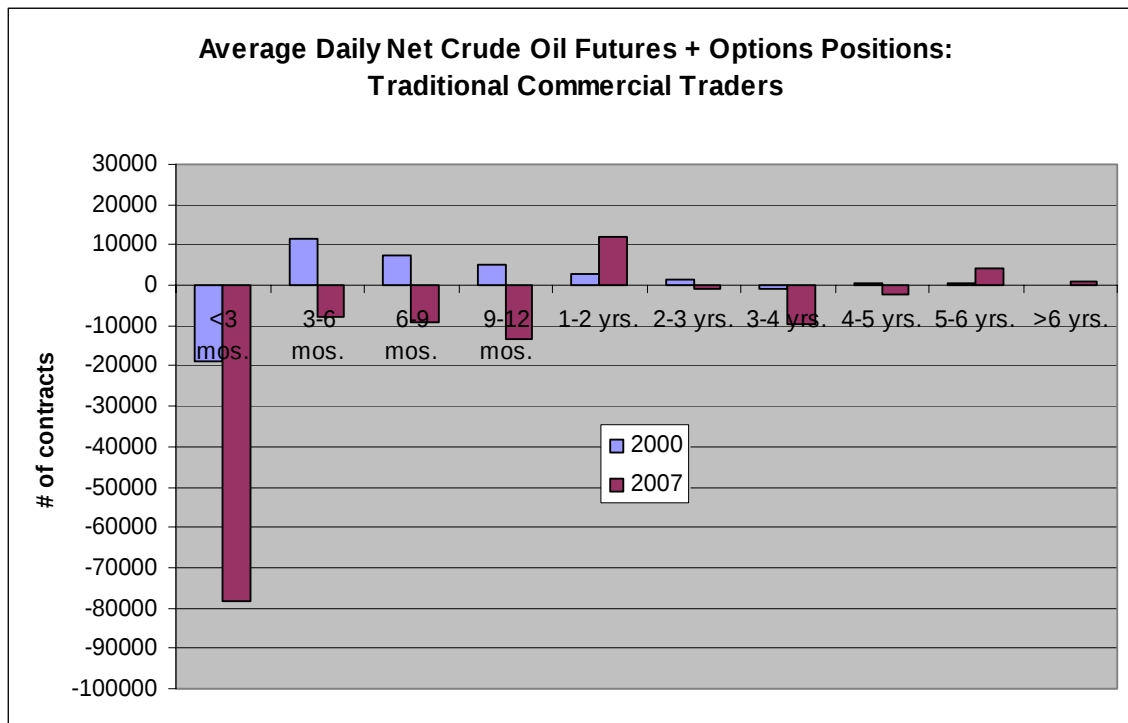


Figure 2a – Trends in Traditional Commercial Trader Open Interest

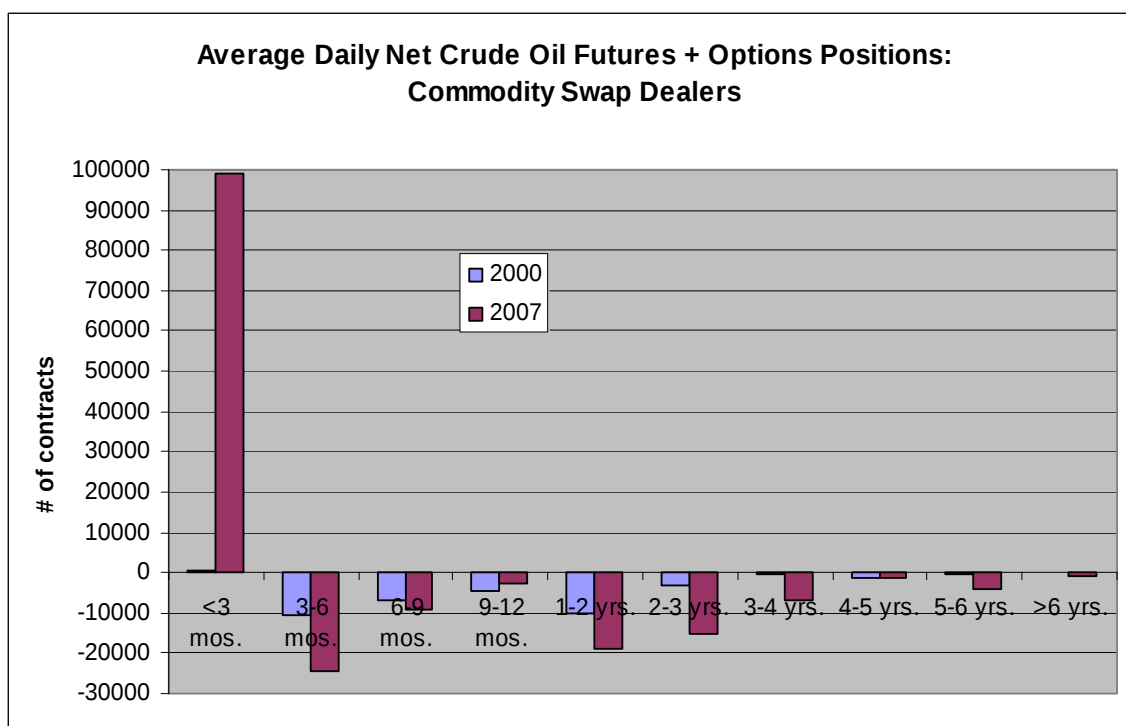


Figure 2b – Trends in Swap Dealer Open Interest

Figure 2b also demonstrates the growth in swap dealer trading in the near-term futures contract, which largely represents flows from commodity index trading.

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 market, OCE analysis shows that the more recent increase in oil prices to levels above \$100/barrel has not been accompanied by significant changes to the participants in this market. Figure 3 below 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.

**Number of Market Participants in
NYMEX WTI Crude Sweet Oil Futures Markets**

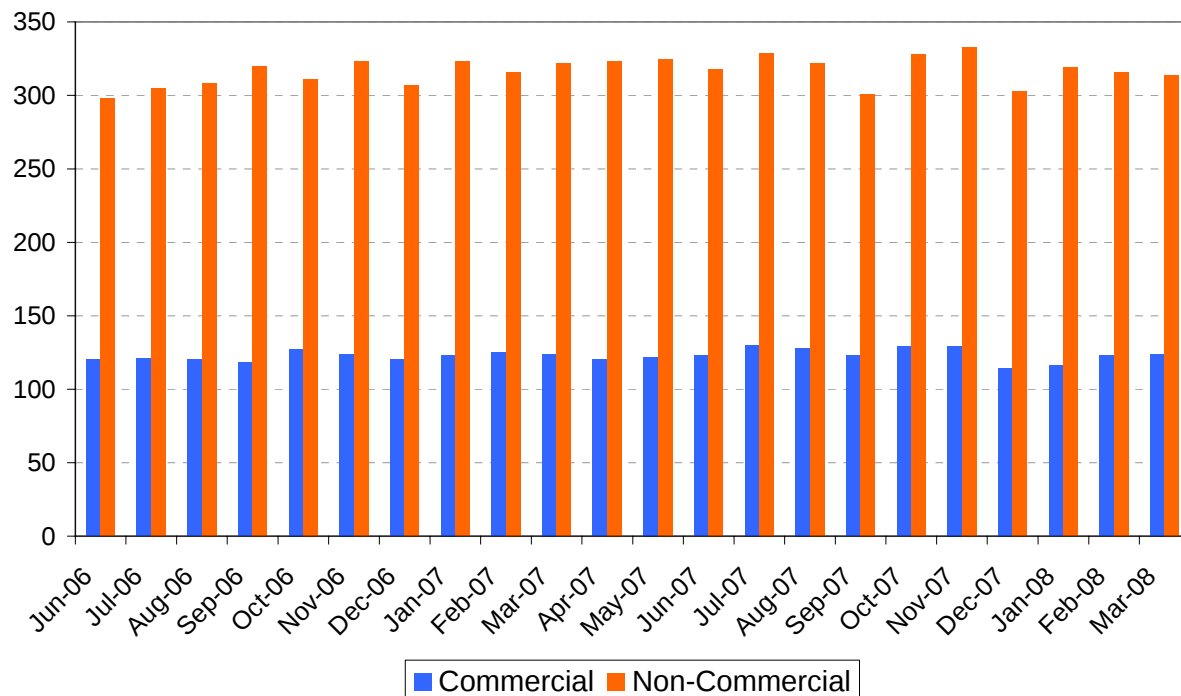


Figure 3 – Commercial vs. Non Commercial Participants

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 have consistently found 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 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. Instead, changes in commercial positions significantly precede crude oil futures price changes.

To highlight this fact more clearly, Figure 4 below plots the prices and the market share of one group of active speculators (managed money traders) over the past 22 months. Notably, while WTI 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 do not amplify crude oil futures price changes. More specifically, the recent crude oil price increases have occurred with no significant change in net speculative positions.

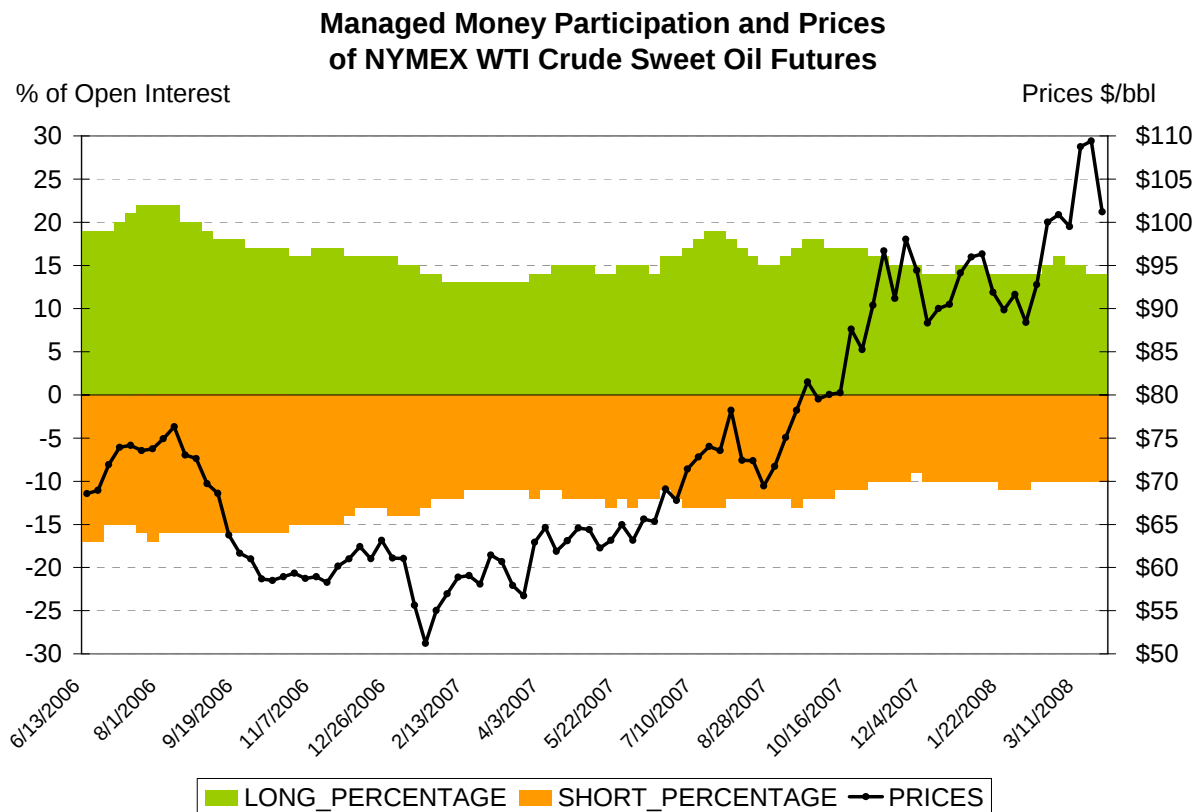


Figure 4 – Managed Money Participation

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 significantly preceding changes in crude oil futures prices. Figure 5 below 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

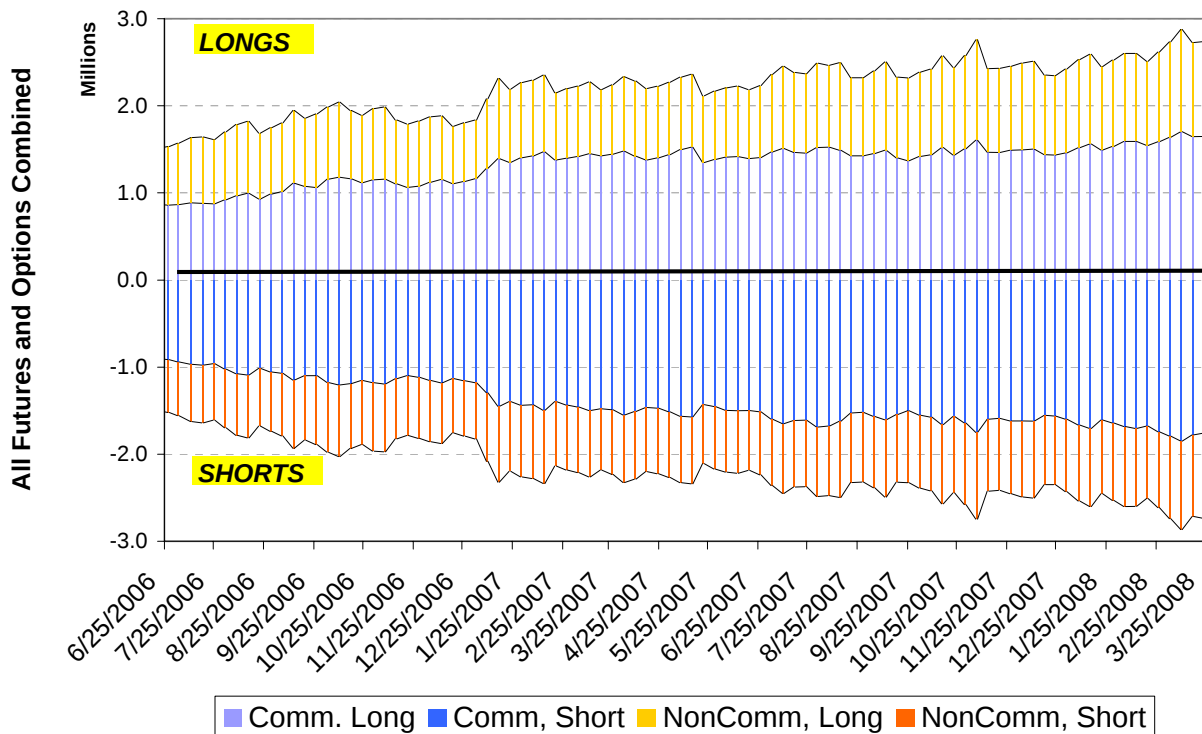


Figure 5– Commercial vs. Non Commercial Open Interest (in millions of contracts)

OCE staff has also studied the propensity of various market participants to be trading on the same side of the market concurrently—a phenomenon commonly known as “herding.” Although many rules govern the behavior of individual traders, the Commission recognizes that concurrent trading by groups of traders – “herds” – can detrimentally affect markets. Herding behavior can represent an impediment to the efficient functioning of markets if market participants follow the herd blindly, causing prices to over-adjust to new information. The OCE study found little evidence of significant herding in crude oil futures markets. In fact, when herding was found, it appeared to be beneficial, and not destabilizing for prices – buy herding appeared only when prices were falling and price increases were unrelated to herding activity.

Conclusion

Looking at the trends in the marketplace, combined with studies on herding behavior and the impact of speculators in the markets, there is little evidence that changes in speculative positions are systematically driving up crude oil prices. Given the relative stability of the makeup of participants and their positions in the markets and the absence of evidence that speculation has caused oil price changes, it appears that fundamentals provide the best explanation for crude oil price increases. These fundamentals can be

either broad factors that affect many markets—like the value of the dollar or general inflation fears—or factors particular to a market—such as strong demand from China and India for crude oil and other commodities. In addition, geopolitical events, such as tensions involving Venezuela, Nigeria, Iran, Iraq, Turkey and the Kurds have affected commodity markets, especially the energy and precious metals markets.

Concerns about the high price of oil are not unique to the United States. I recently presented these findings to the International Energy Agency conference in Paris which included representatives from 40 different countries, OPEC, industry economists and traders. Our findings were supported by many of the conference presenters and attendees who have conducted their own research on the topic. Given the widespread interest in crude oil in particular, it is something I am certain we will continue to monitor closely, as will my counterparts around the world.

This is a dynamic time in the futures markets, given the growth in trading volume, product innovation and complexity, and globalization – in all commodities, including energy. The Commission will continue to work to promote competition and innovation, while at the same time, fulfilling our mandate under the CEA to protect the public interest and to enhance the integrity of U.S. futures markets.