

Some Info on Oil Speculation



AIR TRANSPORT ASSOCIATION

Last revised July 7, 2008

Speculation is Likely a Significant Cause of Price Increases, Even If It's Not the Only Cause

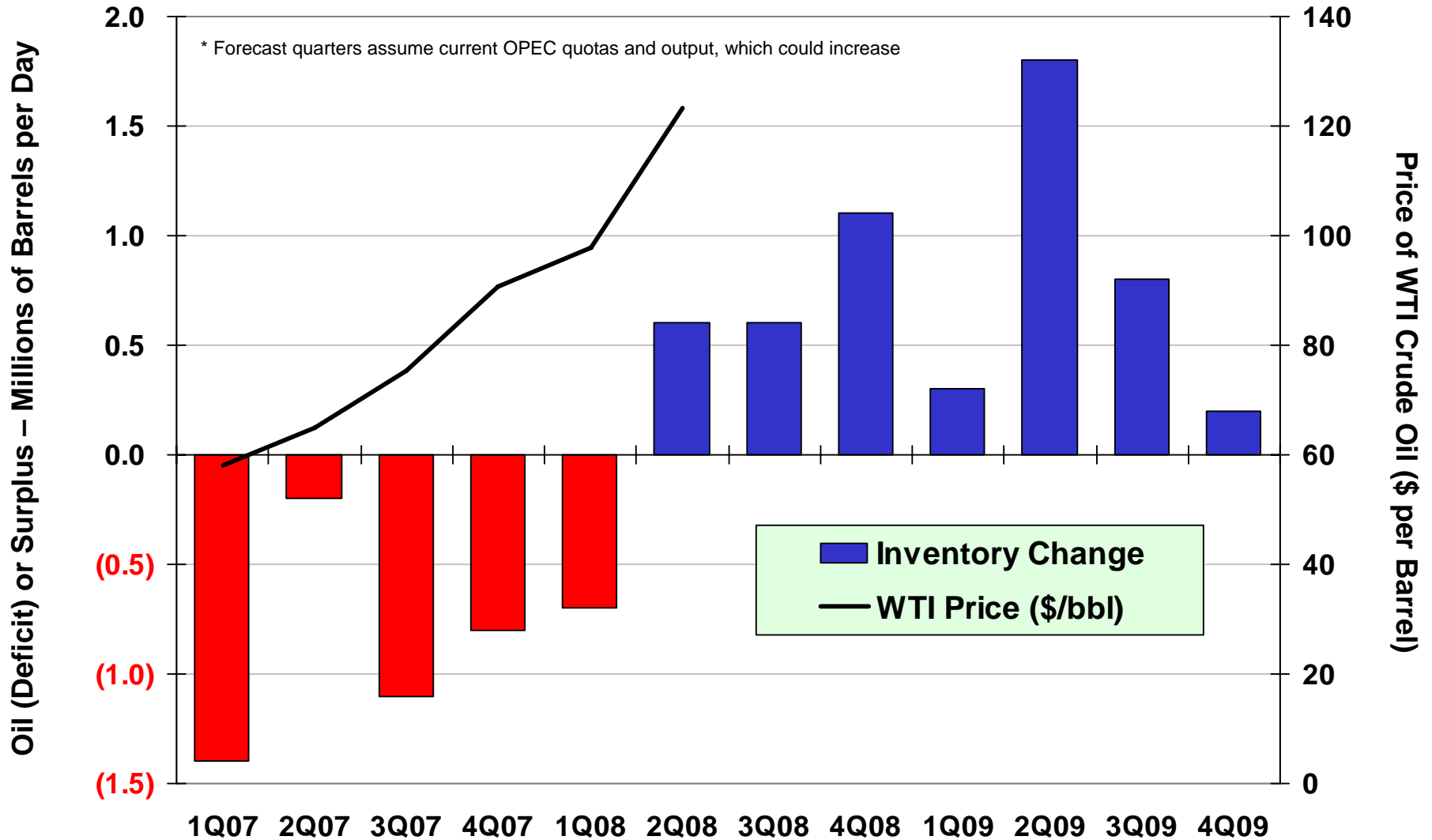
- Undoubtedly, multiple factors are responsible for surging oil prices
- We need to address ALL of them
- First, we should address the ones that can be dealt with the soonest Current crude supplies appear adequate to meet demand
- Oil prices rising faster than the dollar is falling
- Billions of dollars invested in long futures contracts as a result of institutional allocations into commodity index funds
- Classic indications of a speculative bubble, and many experts agree
- There is no guarantee of success, but the downside is virtually nil

The Running of the Bulls

“Oil surged to a record price of nearly \$140 per barrel because the dollar, undermined by a weak economy, spooked investors, who see commodities as the only asset consistently rising in price. Demand and supply fundamentals argue for oil priced well below \$100 per barrel; yet financial speculators and longer-term portfolio investors are bidding up commodities, most notably oil, because of their negative correlation with other asset prices. Hoarding is also probably playing a role: Everyone wants to buy before prices rise again... Since oil prices are driven more by financial factors than by fundamentals, they could easily go higher instead of lower—at least until the economy breaks and energy demand falls sharply.” (Mark Zandi, [Economy.com](#), “U.S. Macro Outlook: Between a Rock and a Hard Place,” June 10, 2008)

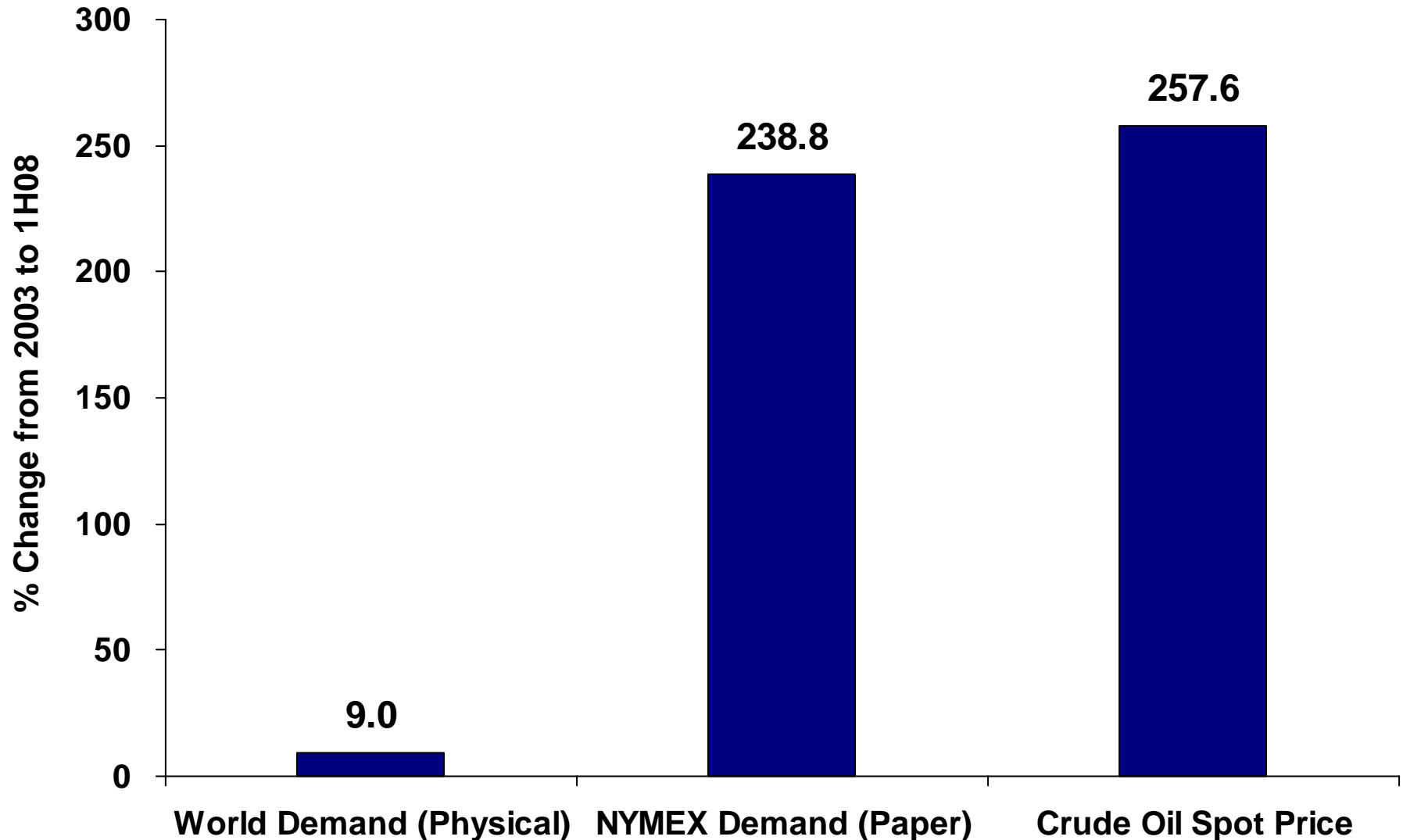
“So if demand growth is faltering and supply is rising, ...why are prices remaining so persistently strong? Partly, we believe it is because of a highly successful marketing campaign on the part of the bulls that has succeeded in getting many market participants to accept and repeat fundamental statements that sound bullish but are not necessarily factually true. We hear, ‘the dollar is weak,’ ‘demand is robust,’ ‘consumers won’t change,’ ‘supply is disappointing,’ ‘oil production is at a peak,’ over and over again when the data suggests otherwise. We also note quite simply that there has been a long-term trending flow of buying into this market that has greatly expanded open interest and trading volume. We hear complaints around the marketplace about how some of us just won’t see reason and give up this talk of speculation or a market bubble, but driving the price even higher is not exactly convincing us that the price is fundamentally justified. On the contrary, we only see higher prices as undermining the fundamentals that much more, making it that more difficult to pin the record prices on a fundamental cause.” (*Citi Futures*, PM Energy News & Views, June 5, 2008)

In 2008, Crude Oil Prices Ignoring Build in Inventories*



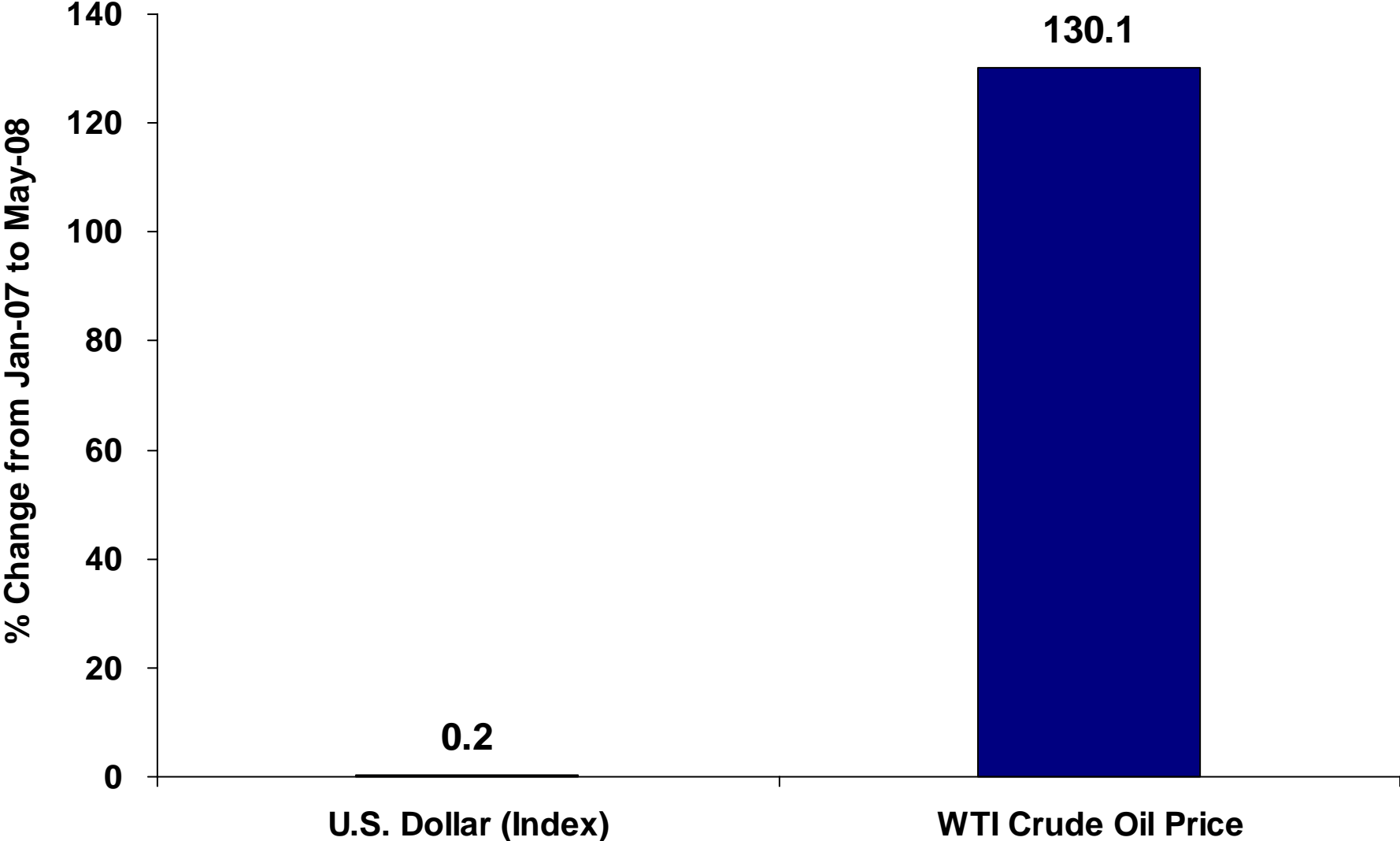
Sources: Lehman Brothers and International Energy Agency (IEA) Oil Market Report

“Paper” Demand for Oil, and Prices, Have Skyrocketed, While Physical Demand Has Increased Only Modestly



Sources: International Energy Agency and CFTC

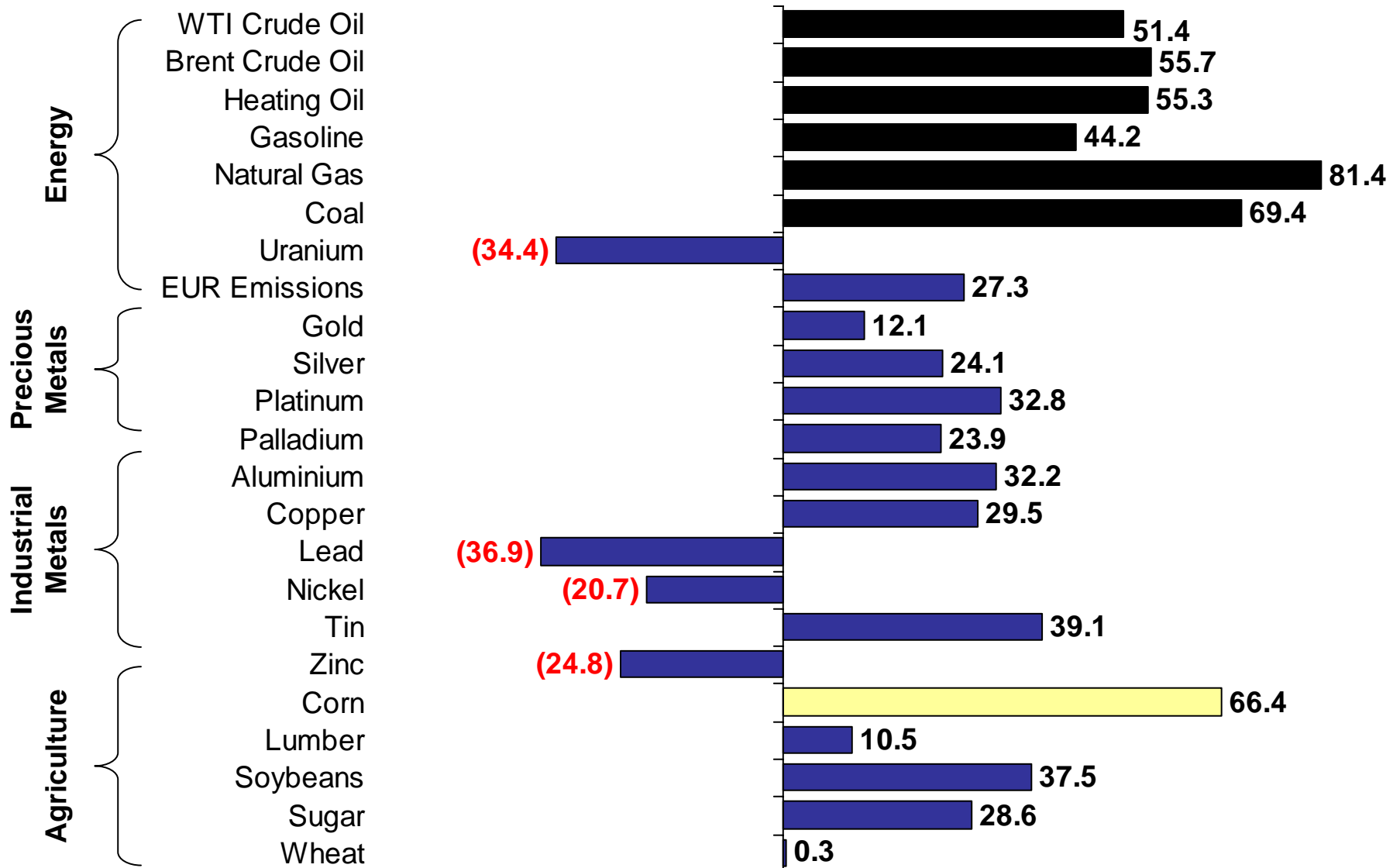
Since the Beginning of 2007, the Increase in the Price of Oil Has Dwarfed the Change in the Value of the Dollar



Sources: Energy Information Administration and [Federal Reserve Bank of Atlanta](#)

Energy Policy a Factor in Rising Price of Many Commodities

% Change in Price Since January 1, 2008*



“Not Justified; Starved for Access”

May 30 — During testimonies to Congress last week, oil executives said that while limited access to foreign resources and rising industry costs have helped push prices higher, the current level isn't justified by oil market fundamentals. The price of oil should be “somewhere between \$35 and \$65 a barrel,” John Hofmeister, president of Shell Oil Co., the Houston-based subsidiary of Royal Dutch Shell Plc, said at a Senate hearing on May 21. John Lowe, executive vice president of ConocoPhillips, said oil should be “about \$90 a barrel in this environment.”

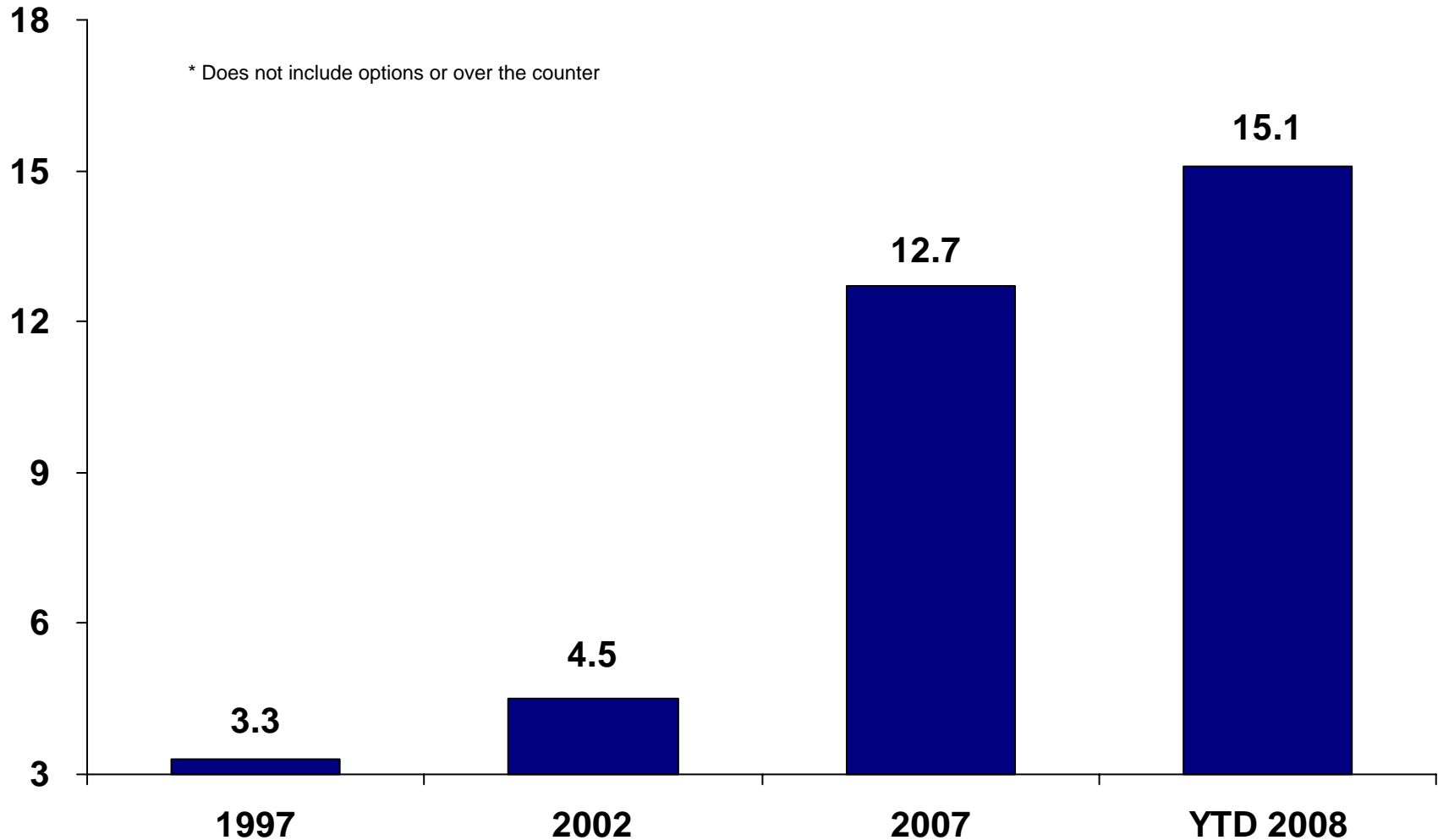
May 22 — U.S. oil policy is causing speculators to drive up prices to record levels, said John Hofmeister... Hofmeister said that by restricting access to domestic supplies, U.S. policymakers are sending a signal to investors that output will be constrained, thereby driving up prices. “There is no confidence that we can explore and produce more barrels given the U.S. is not letting us do it and that is preventing people from having an optimistic outlook on oil futures, so it looks like demand will continue to run ahead of supply,” Hofmeister said... “We are starved for access, we are not making that up; it is a fact,” said John Lowe, executive vice president for ConocoPhillips.

Matthew Leising and Alexander Kwiatkowski, “U.S. Probes Crude Oil Trading for Price Manipulation,” Bloomberg.com (May 30, 2008) and Daniel Whitten, “U.S. Policies Fuel Oil Speculation, Hofmeister Says,” Bloomberg.com (May 22, 2008)

Data Reveals Increasing “Paper Chase” for Energy

Ratio of Paper Barrels to Physical Barrels Up Sharply Over the Decade

Avg. Daily Trading Volume of Key Energy Futures* vs. World Oil Demand



Source: International Strategy & Investment (ISI) Integrated Oil Research Group

“Oil Dot-com”

“With the latest push to the upside, we see the crude oil market becoming even more completely divorced from any connection to fundamental factors and becoming even more obsessed with the simple question, ‘How high can it go?’ Traders have often cited a weak dollar as an influence on the rising price of crude oil, ...but the US dollar index has not actually posted a new low since March 17 and its net decline since we began tracking on August 22, 2007 has been 10.6%, compared with a corresponding rise in crude oil of 109.8%.” (“PM Energy News & Views,” Citi Futures Perspective, July 3, 2008)

“Our study indicated that for every \$100 million in new inflows, WTI prices increase by 1.6%... [W]e are seeing the classic ingredients of an asset bubble. Financial investors tend to ‘herd’ and chase past performance, comforted by the growing analytical conclusion that markets are tightening, and new inflows, in turn, drive prices higher. Larger allocations by institutional investors, including new sovereign wealth funds desiring to increase their commodity exposure, play a role. So does uncertainty about the true state of market fundamentals...and other factors that buttress the current bullish consensus.” (“Oil Dot-com,” Lehman Brothers Energy Special Report, May 29, 2008)

“The increasing prevalence of futures contracts has transformed the nature of oil markets. It is no longer only about the value of oil as an energy commodity, but also... oil as a financial asset.” (Goldman Sachs, “Energy Roundup: Oil Bulls Take Charge,” Oct. 19, 2007)

Testimony of Fadel Gheit on June 23, 2008

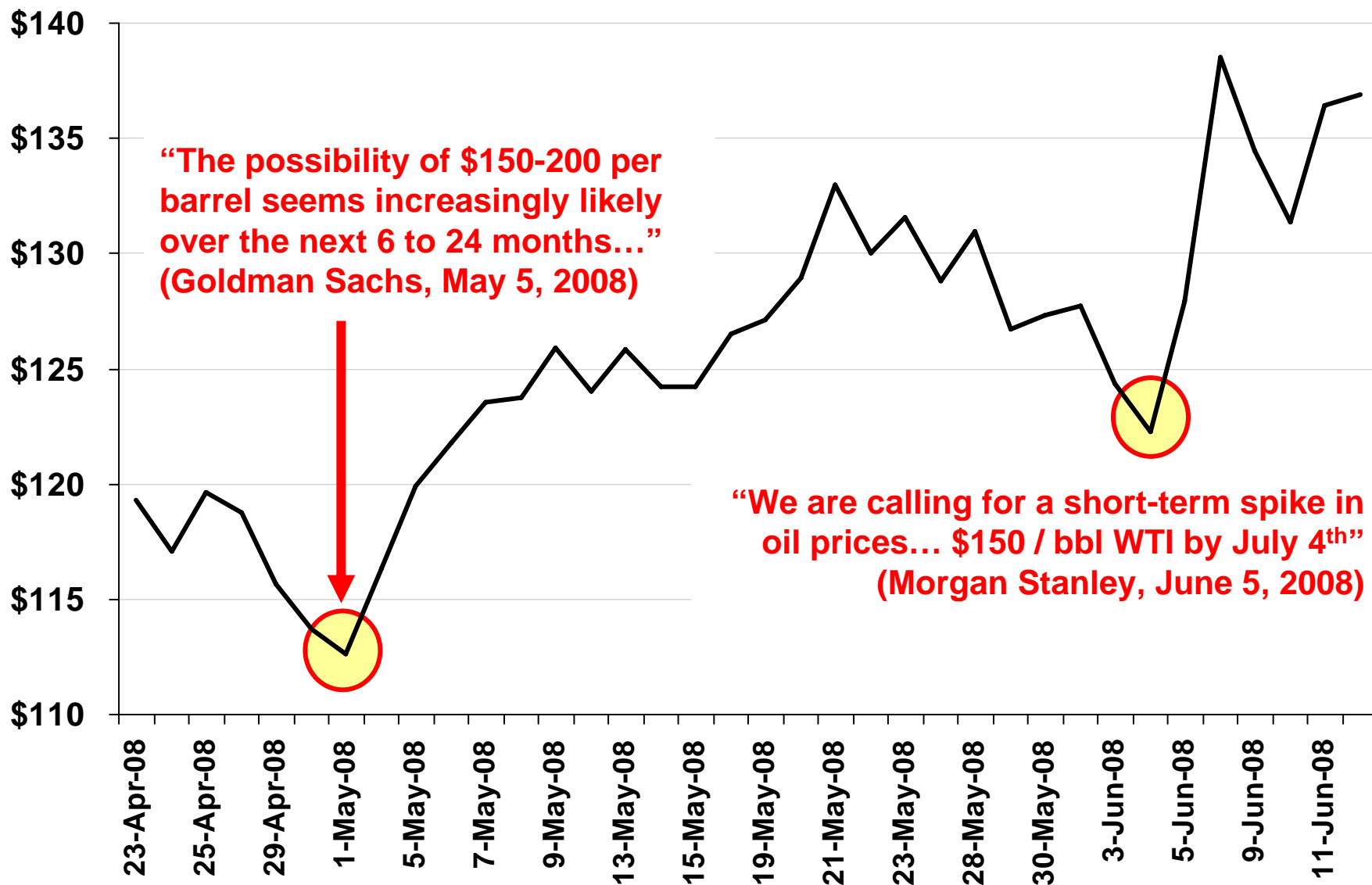
Managing Director and Senior Oil Analyst, Oppenheimer & Co. Inc.

“Oil prices, which are near their record high reached a couple of weeks ago, are up more than 100% from a year-ago level, despite adequate supply, with no disruptions, and weaker demand outlook than the year ago projection, which should have helped keep oil prices at or below their year-ago level of \$65 per barrel, but instead, oil prices more than doubled. **Large investment banks keep fanning the fire by making exaggerated oil price predictions that they believe they can help achieve, given the government’s inability or unwillingness to hold them accountable.** Below are the main reasons **we believe the record oil prices are inflated by speculation and not justified by market fundamentals:**

- There were no unexpected changes in industry fundamentals in the last 12 months, when crude oil prices were below \$65 per barrel. **I cannot think of any reason that explains the run-up in crude oil price, beside excessive speculation.**
- World oil demand growth forecasts have been trimmed to reflect the current economic slowdown, which should have resulted in lower, not higher, oil prices.
- World oil production is economic at prices well below \$65 per barrel. Marginal replacement cost, however, is distorted by high government take of royalties and taxes due to record oil prices.
- Windfall profits have boosted capital spending and inflated service cost. Bursting the oil bubble could help return the oil markets to more realistic levels.
- Record oil prices in a highly speculated oil market provide fewer incentives for oil exporting countries to increase production, since oversupply, combined with tighter regulations, could cause oil prices to crash.

Source: http://energycommerce.house.gov/cmte_mtgs/110-oi-hrg.062308.EnergySpec.shtml

The Two Largest Oil Price Spikes of 2008 Were Preceded by Bullish Reports, 30 Days Apart, by Wall Street Banks



Goldman Sachs's Own Research Concedes That Speculation is Contributing to Price Level and Volatility

- “Without question increased fund flow into commodities has boosted prices. The issue is whether the resulting oil price is ‘real’ or represents speculative excess; we strongly believe the former.”
- “The so-called commodity speculator should be applauded for speeding up the message to both oil companies and consumers that energy markets are tight. Commodity speculators also encourage venture capital and private equity firms to invest in alternative energy and other new forms of supply.”
- “During the 1990s, very little investment went into clean energy. Today, alternative energy investment is rising rapidly thanks in large part to the role of commodity investors in bidding up energy prices.”
- “We are also boosting our normalized oil price to \$75 per barrel from \$60 per barrel before. We continue to use 2012 as our first ‘normalized’ year. Our normalized view continues to be based on a combination of oil prices and costs that yields a ‘cost of capital’ return for industry overall. The specific oil price has always been of secondary importance to us. We continue to assume that in a less bullish price environment, costs will fall.”

Source: Goldman Sachs, “\$100 reality, part 2: Has the super-spike end game begun?” (May 5, 2008)

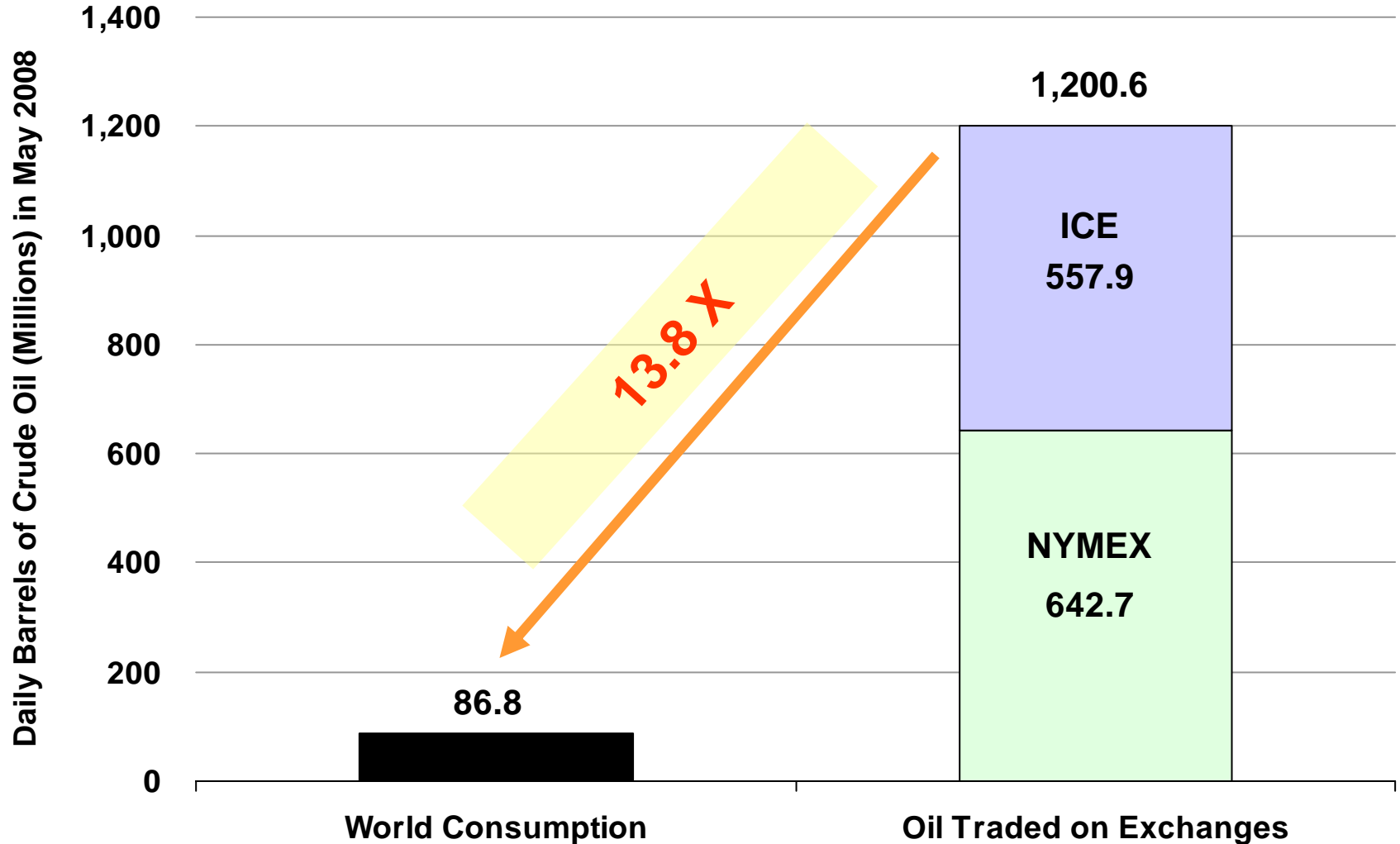
Super Spike?

“There just doesn’t seem to be any physical tightness to go along with the rise in price and at this stage, with the demand side of the market trending weaker and Saudi Arabia increasing production, we would not expect to see significant tightness develop anytime soon. The lack of tightness...leaves the market increasingly dependent on belief that a peak in global oil production is imminent... We see neither a downtrend in proven oil reserves, nor a lack of new discoveries, nor a shortfall in investment in new production capacity that would support such a view. However, for now, it seems that the simple ‘they’re not making any more of it’ argument is continuing to carry the day... Without a major supply disruption or a decline in oil production related to depletion, we see the market as extremely overvalued, with downside risk that could extend all the way back to the \$70-80 area over the next 6-9 months...” (“PM Energy News & Views,” Citi Futures Perspective, July 3, 2008)

“[W]e are now in unexplored territory... [J]ust this morning, Goldman Sachs has revised their ‘super-spike’ scenario to \$150-\$200. It can not be viewed as any kind economic prescience to say that if it comes to pass, it will have an overwhelmingly negative effect on the global economy... [T]here seems to be very little to prevent even higher prices, particularly with so much blame being assigned and no substantive solutions being proposed.” (“Rome is Burning, Lots of Fiddling,” MF Global Inc., May 6, 2008)

Investors Playing Enormous Role in Crude Oil Markets

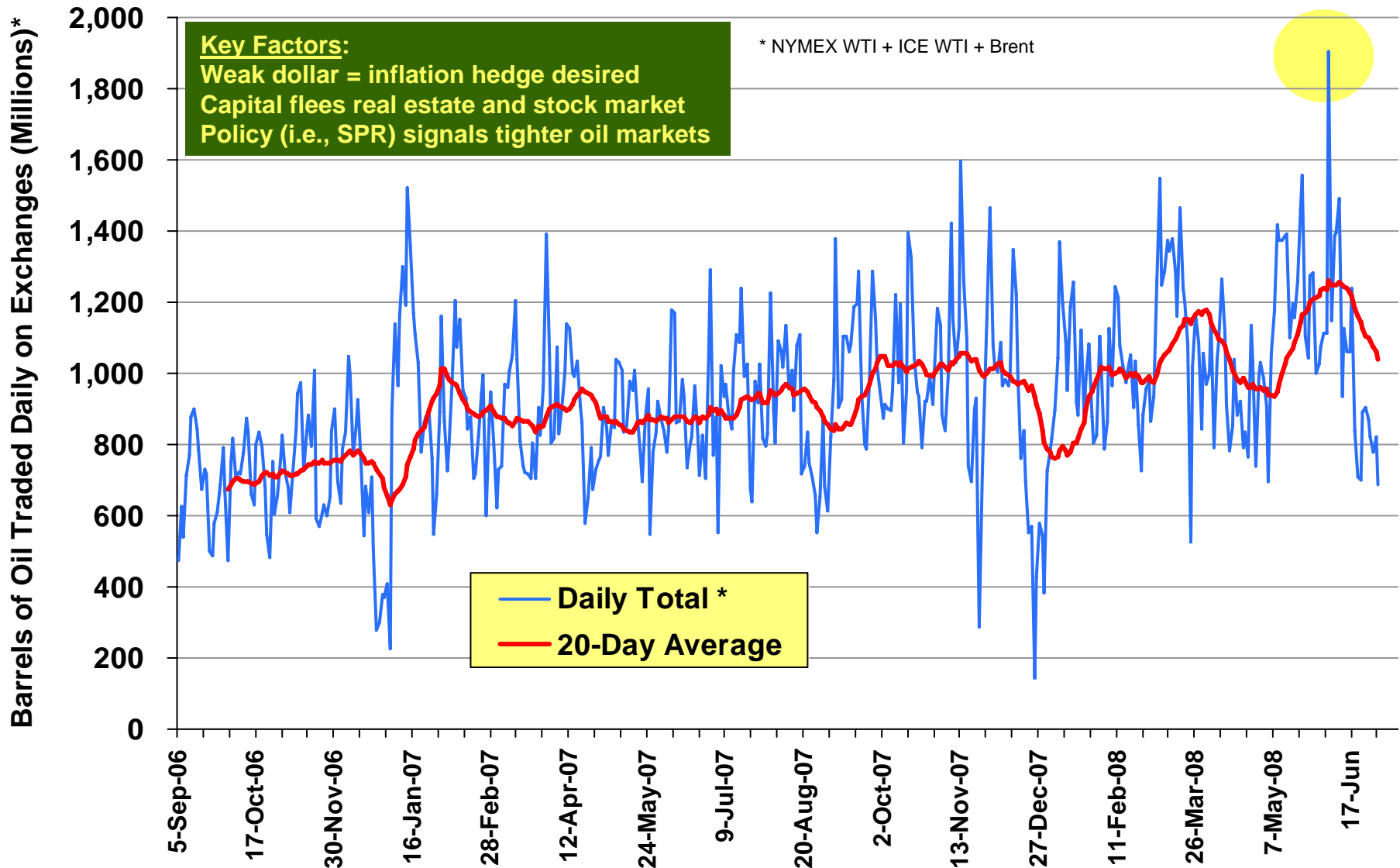
In May 2008, Paper Market Was 13.8 Times Size of Physical Market



Sources: Citi Futures Perspective, International Energy Agency, New York Mercantile Exchange (NYMEX) and London IntercontinentalExchange® (ICE)

Investors Playing Increasing Role in Crude Oil Markets

Composite Crude Oil Volume* Set New Record of 1,906,016 Contracts on June 6



Sources: Citi Futures Perspective and IEA, from New York Mercantile Exchange (NYMEX) and London [IntercontinentalExchange](#)® (ICE)

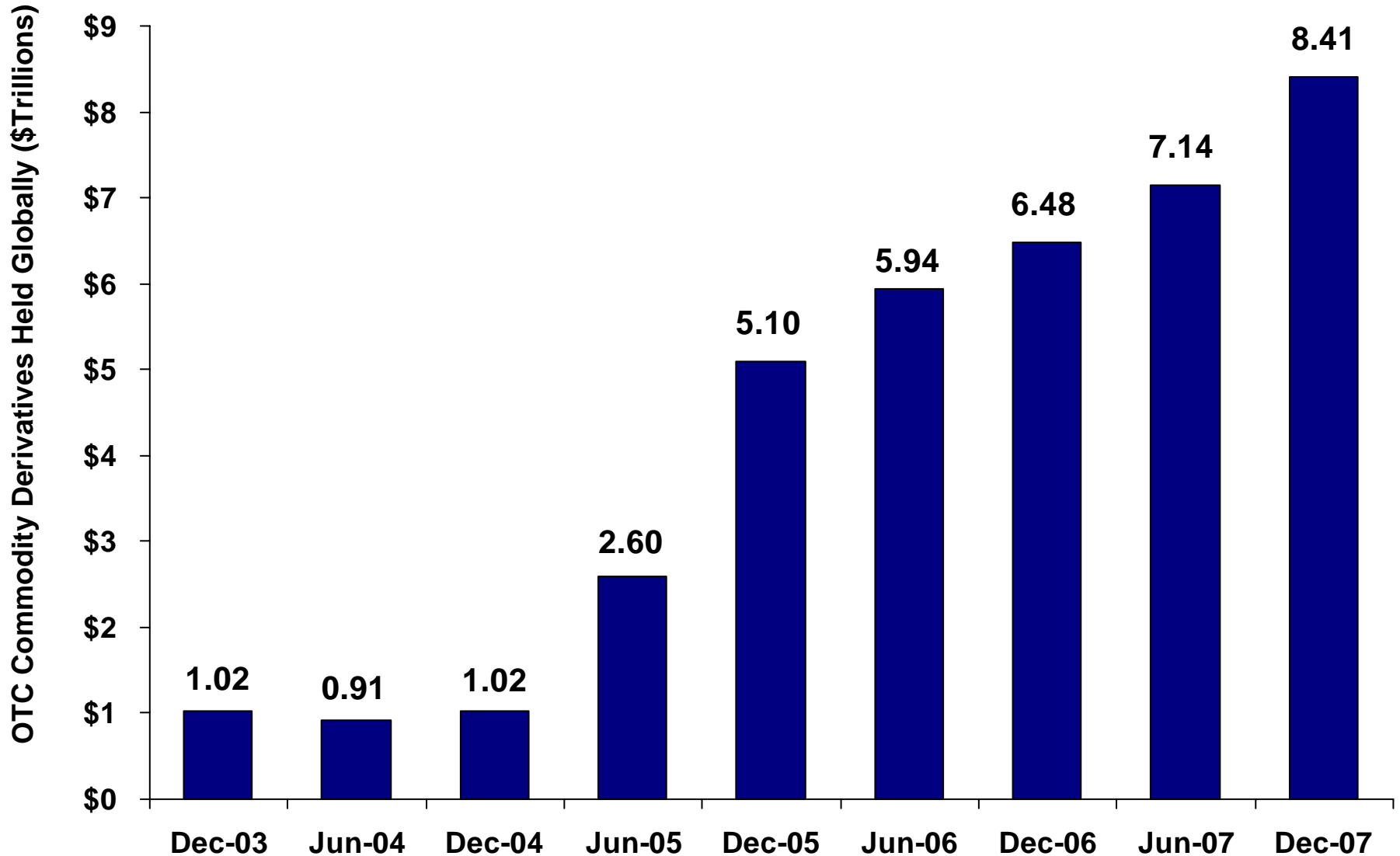
“Upward Thrust”

“Friday (June 6, 2008) will live in the memory of participants for a long time. The task now is trying to determine why and how it happened and what will happen next. There is probably nowhere in the five-year history of the current rally with a comparable move that is not associated with an event of some import. A comment by a senior Israeli minister is not an event. The introduction of military forces into southern Lebanon two summers ago was an event. Obviously, speculative interests were returning to the market... While there is little doubt of the speculative value of a strategically vital commodity like oil, it can easily become overvalued from time to time. We think this is such a time.” (“The Daze of Our Lives,” MF Global Energy Overview, June 9, 2008)

“There may now be upwards of \$25-\$30 of speculation in the price of crude... [M]ost participants seem gripped by a psychology, right now, that they must be in the oil market. This sort of herd mentality usually is adopted as a trend ages, and this one has been going on for quite a while... Sellers will not appear in any kind of meaningful way, even though there is near unanimous agreement that prices do not reflect underlying fundamentals, until there is indisputable evidence of structural economic changes... Until then, there seems to be no stopping oil’s upward thrust.” (“We’re in Shipped Shape,” MF Global Energy Risk Management Group, May 9, 2008)

Over-the-Counter Derivative Positions Have Soared

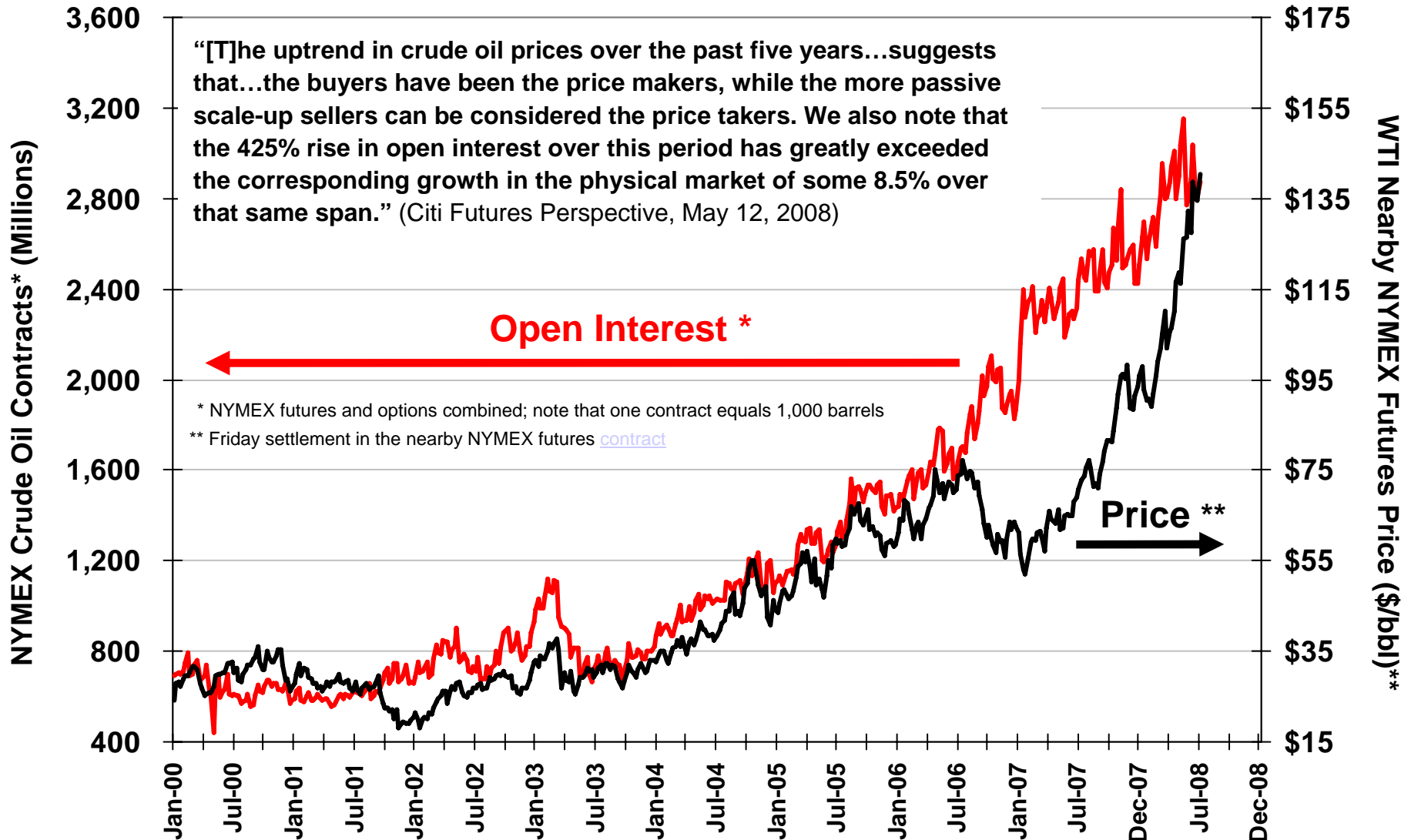
U.S. and Foreign Banks (Trillion Dollars)



Source: International Strategy & Investment (ISI) Integrated Oil Research Group

NYMEX Crude Oil Contracts Have Soared Since 2000

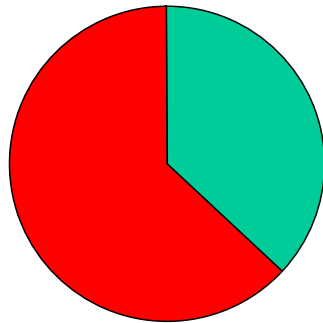
On May 13, Total Open Interest Surpassed Equivalent of 3.15 *Billion* Barrels



Sources: Commodity Futures Trading Commission (<http://www.cftc.gov/marketreports/commitmentsoftraders/index.htm>) and Energy Information Administration

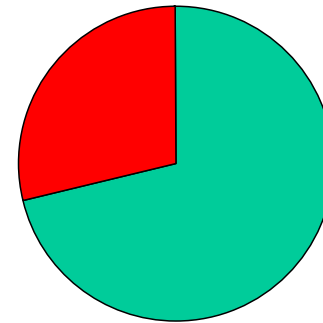
Balance of NYMEX Crude Oil Holdings Has Shifted

2000
"Speculators" = 37%



■ Speculators ■ Physical Hedgers

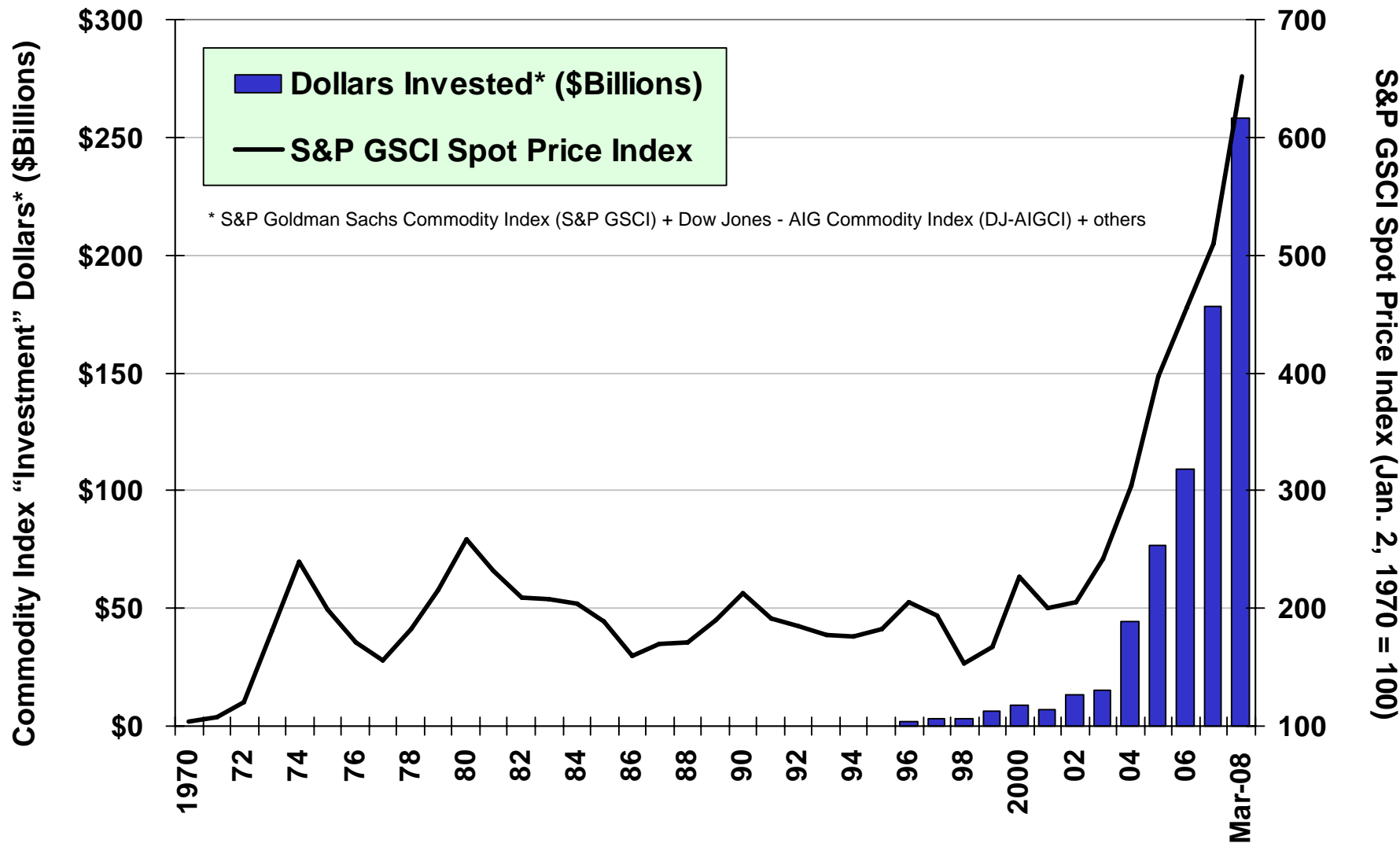
2008
"Speculators" = 71%



■ Speculators ■ Physical Hedgers

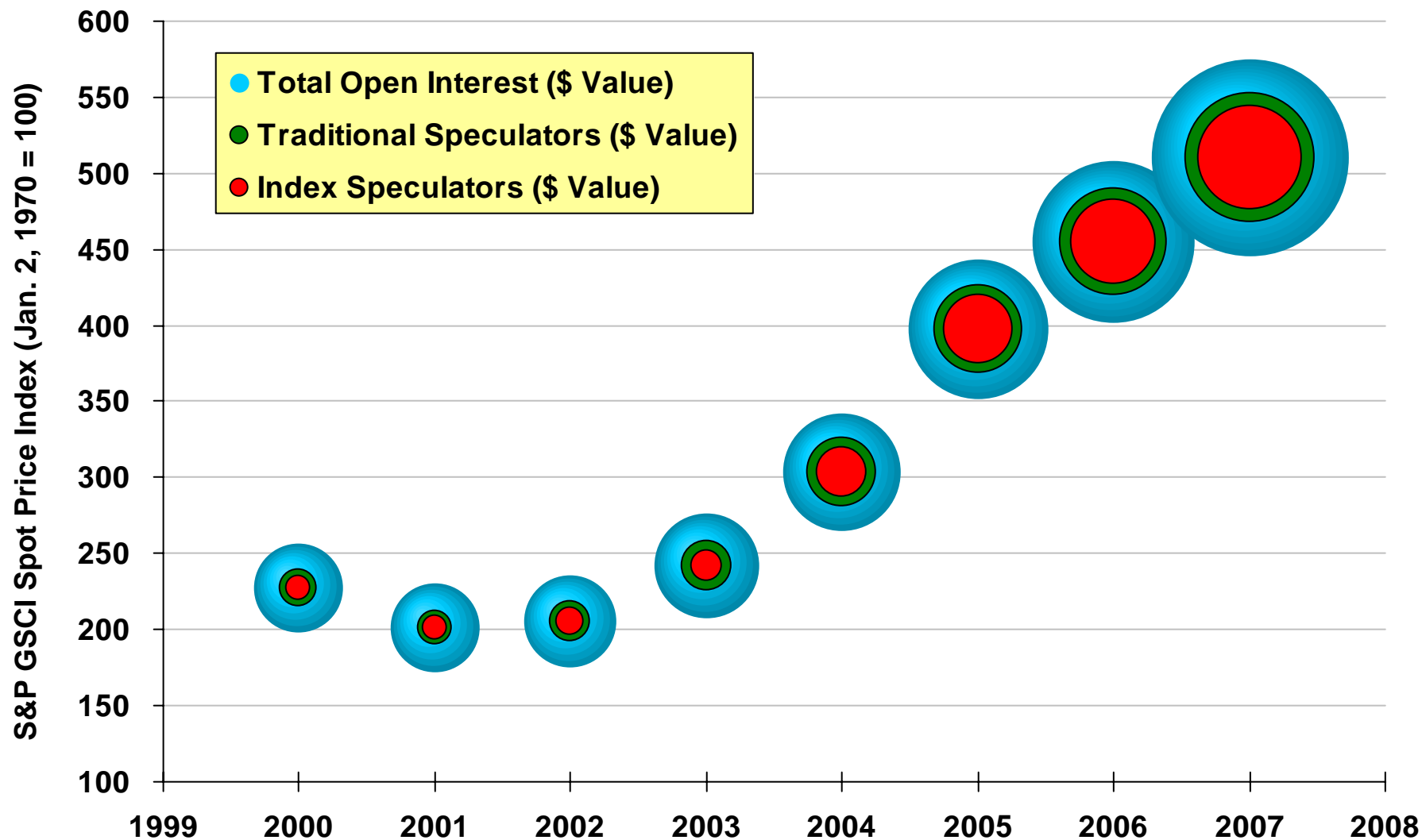
Source: House Subcommittee on Oversight and Investigations via "Panel Cites Surge in Speculative Oil Trades," *Wall Street Journal* (June 23, 2008)

Assets Allocated to Commodity Index Trading* Up Sharply Since End of 2003 Along With Commodity Prices



Sources: Goldman Sachs, Dow Jones, Bloomberg and estimates derived from the Commodity Futures Trading Commission, in testimony of Michael G. Masters

Additional \$250B in Assets Allocated to Commodity Index Funds (25 Commodities) Since 2000; Price Up 183%



Sources: Goldman Sachs, Dow Jones, Bloomberg and estimates derived from the CFTC as reported in testimony of Mike Masters

* Standard & Poor's (S&P) Goldman Sachs Commodity Index (GSCI) plus Dow Jones AIG Index plus others

Fundamental Differences or Irrational Exuberance?

“If the crude oil market is not physically tight now, there is at least a belief on the part of a bullish speculator that it will become so later. What has driven the market so far...is that such a high percentage of the speculative trade has become aligned in one direction... It also seems hard to dispute that the growth in the size of futures and options trade has something to do with the price movement... [W]e believe that growth in NYMEX trade has certainly made it more dominant relative to the physical market in setting prices than in the past... With the futures market this much larger than the underlying physical market, we think the potential for a speculative bubble to form is certainly expanded.” (PM Energy News & Views, *Citi Futures Perspective*, June 12, 2008)

“Irrational exuberance is the psychological basis of a speculative bubble. I define a speculative bubble as a situation in which the news of price increases spurs investor enthusiasm, which spreads by psychological contagion from person to person, in the process amplifying stories that might justify the price increases and bringing in a larger and larger class of investor, who, despite doubts about the real value of an investment, are drawn to it partly through envy of others’ successes and partly through a gambler’s excitement.” (Robert J. Shiller, *Irrational Exuberance*, Sec. Ed., 2005, p. 2)

Commodity Futures Markets: Chronology of Key Events

- 1848** Chicago Board of Trade established for grain
- 1865** Precursors to NYMEX and Chicago MERC established
- 1922** Grain Futures Act, in response to manipulation, cracks down on “excessive speculation” and establishing framework for regulated commodity exchanges
- 1936** Commodity Exchange Act broadens regulations to include other agric. commodities
- 1974** Commodity Futures Trading Commission created to regulate commodity exchanges
- 1989** CFTC issues “swaps policy statement,” saying it would not seek to regulate over-the-counter swap transactions
- 1990** Transnor decision prompts CFTC to rule that Brent North Sea contracts are forward (not futures) contracts and not subject to regulation
- Oct-91** CFTC grants J. Aron and Company (now the commodities division of Goldman Sachs) open-ended “bona fide” hedge exemption for index investments
- May-00** Intercontinental Exchange created in Atlanta as electronic energy trading platform
- Dec-00** Commodity Futures Modernization Act (Dec. 21 law) codifies exemptions and exclusions for various energy and financial derivatives from CFTC oversight; Intercontinental Exchange created in Atlanta as electronic energy trading platform
- 2001** Regulations implementing CFMA finalized Oct. 9
- 2005** CFTC expands position limits in wheat, corn and soybean trading for speculators
- Jul-06** CFTC grants index funds exemptions from position limits imposed on speculators

Commodity Futures Markets: Key Terms

Commercial: An entity involved in the production, processing, or merchandising of a commodity.

Derivative: A financial instrument, traded on or off an exchange, the price of which is directly dependent upon (i.e., “derived from”) the value of one or more underlying securities, equity indices, debt instruments, commodities, other derivative instruments, or any agreed upon pricing index or arrangement (e.g., the movement over time of the Consumer Price Index or freight rates). Derivatives involve the trading of rights or obligations based on the underlying product, but do not directly transfer property. They are used to hedge risk or to exchange a floating rate of return for fixed rate of return. Derivatives include futures, options, and swaps. For example, futures contracts are derivatives of the physical contract and options on futures are derivatives of futures contracts.

Forward Contract: A cash transaction common in many industries, including commodity merchandising, in which a commercial buyer and seller agree upon delivery of a specified quality and quantity of goods at a specified future date. Terms may be more “personalized” than is the case with standardized futures contracts (i.e., delivery time and amount are as determined between seller and buyer). A price may be agreed upon in advance, or there may be agreement that the price will be determined at the time of delivery.

Futures Contract: An agreement to purchase or sell a commodity for delivery in the future: (1) at a price that is determined at initiation of the contract; (2) that obligates each party to the contract to fulfill the contract at the specified price; (3) that is used to assume or shift price risk; and (4) that may be satisfied by delivery or offset.

Commodity Futures Markets: Key Terms (cont'd)

Hedging: Taking a position in a futures market opposite to a position held in the cash market to minimize the risk of financial loss from an adverse price change; or a purchase or sale of futures as a temporary substitute for a cash transaction that will occur later. One can hedge either a long cash market position (e.g., one owns the cash commodity) or a short cash market position (e.g., one plans on buying the cash commodity in the future).

Intermediary: A person who acts on behalf of another person in connection with futures trading, such as a futures commission merchant, introducing broker, commodity pool operator, commodity trading advisor, or associated person.

International Swaps and Derivatives Association (ISDA): A New York-based group of major international swaps dealers, that publishes the Code of Standard Wording, Assumptions and Provisions for Swaps, or Swaps Code, for U.S. dollar interest rate swaps as well as standard master interest rate, credit, and currency swap agreements and definitions for use in connection with the creation and trading of swaps.

Large Traders: A large trader is one who holds or controls a position in any one future or in any one option expiration series of a commodity on any one exchange equaling or exceeding the exchange or CFTC-specified reporting level.

Long: (1) One who has bought a futures contract to establish a market position; (2) a market position that obligates the holder to take delivery; (3) one who owns an inventory of commodities.

Lookalike Swap: An over-the-counter swap that is cash settled based on the settlement price of a similar exchange-traded futures contract on a specified trading day.

Commodity Futures Markets: Key Terms (cont'd)

Manipulation: Any planned operation, transaction, or practice that causes or maintains an artificial price. Specific types include corners and squeezes as well as unusually large purchases or sales of a commodity or security in a short period of time in order to distort prices, and putting out false information in order to distort prices.

Margin: The amount of money or collateral deposited by a customer with his broker, by a broker with a clearing member, or by a clearing member with a clearing organization. The margin is not partial payment on a purchase. Also called Performance Bond. (1) Initial margin is the amount of margin required by the broker when a futures position is opened; (2) Maintenance margin is an amount that must be maintained on deposit at all times. If the equity in a customer's account drops to or below the level of maintenance margin because of adverse price movement, the broker must issue a margin call to restore the customer's equity to the initial level. See Variation Margin. Exchanges specify levels of initial margin and maintenance margin for each futures contract, but futures commission merchants may require their customers to post margin at higher levels than those specified by the exchange. Futures margin is determined by the SPAN margining system, which takes into account all positions in a customer's portfolio.

Open Interest: The total number of futures contracts long or short in a delivery month or market that has been entered into and not yet liquidated by an offsetting transaction or fulfilled by delivery. Also called open contracts or open commitments.

Over-the-Counter (OTC): The trading of commodities, contracts, or other instruments not listed on any exchange. OTC transactions can occur electronically or over the telephone. Also referred to as Off-Exchange.

Commodity Futures Markets: Key Terms (cont'd)

Position: An interest in the market, either long or short, in the form of one or more open contracts.

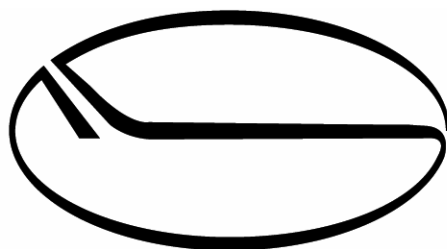
Short: (1) The selling side of an open futures contract; (2) a trader whose net position in the futures market shows an excess of open sales over open purchases.

Speculator: In commodity futures, an individual who does not hedge, but who trades with the objective of achieving profits through the successful anticipation of price movements.

Speculative Position Limit: 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 an exchange and/or by the CFTC.

Swap: In general, the exchange of one asset or liability for a similar asset or liability for the purpose of lengthening or shortening maturities, or raising or lowering coupon rates, to maximize revenue or minimize financing costs. This may entail selling one securities issue and buying another in foreign currency; it may entail buying a currency on the spot market and simultaneously selling it forward. Swaps also may involve exchanging income flows; for example, exchanging the fixed rate coupon stream of a bond for a variable rate payment stream, or vice versa, while not swapping the principal component of the bond. Swaps are generally traded over-the-counter.

Trading Facility: A person or group of persons that provides a physical or electronic facility or system in which multiple participants have the ability to execute or trade agreements, contracts, or transactions by accepting bids and offers made by other participants in the facility or system.



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