



### **Comments on CFTC Commissioner** Bart Chilton's "How Big is Big?"

James A. Overdahl, Ph.D.

Vice President

*Oil and the Macroeconomy in a Changing World*, Federal Reserve Bank of Boston, Boston, Massachusetts

June 9, 2010

Insight in Economics™

# Outline: Focus on Two Main Topics



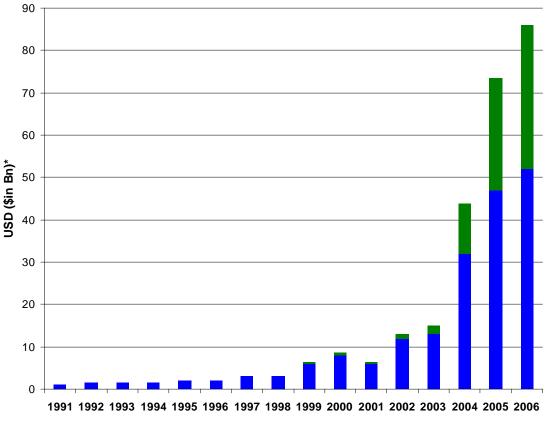
- "Massive Passives" as the "New Speculators"
- CFTC position limit proposal

# **Questions About Commodity-Linked Investments**



- How much has commodity-linked investment exposure grown over the past decade?
- Why do investors want commodity exposure?
- How do investors gain exposure to commodity prices?
- How do commodity-linked investments find their way to the futures markets?

# **Commodity-Linked Index Exposure Across Time**

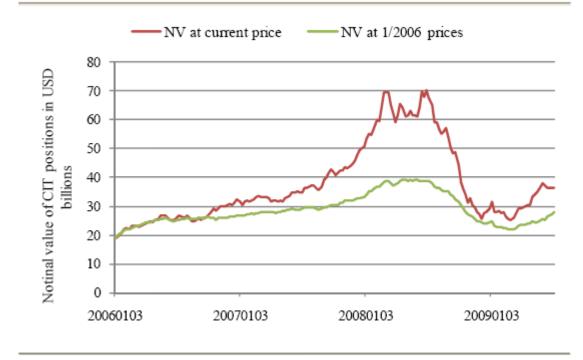


■ GSCI and Sub-indices ■ Other Commodity Indices

**NERA** 

#### Need to Use Caution When Using Value to Measure Size of Commodity Investments



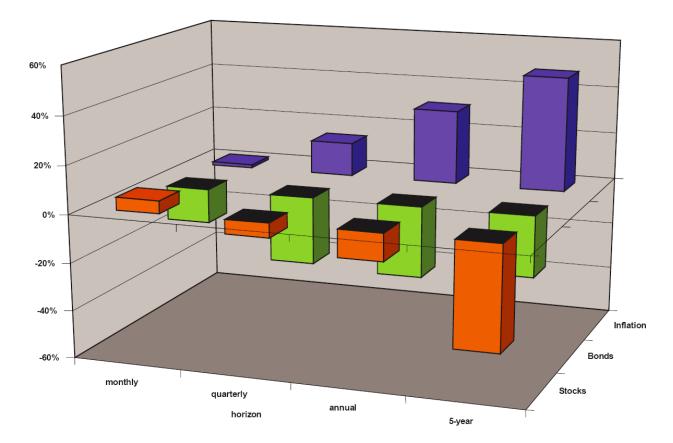


#### Commodity Index Returns vs. Inflation and Returns on Stocks and Bonds



**Correlation with Commodity Futures** 

Overlapping return data 1959/7-2004/3



#### What We Know About Investors Using Commodity Index-Linked Products



- Not "Hot Money." In general, participants follow deliberate long-term asset allocation strategies
- Many participants are satisfied passively tracking a commodity index with a portion of their portfolio
- Other participants follow active strategies in an attempt to outperform a benchmark index
- Commodity index trackers roll their positions well ahead of contract expiration, therefore they are not a factor at expiration, when contracts are most vulnerable to attempted manipulation
- As a group, they are predominately long

# Commodity-linked Investment is Predominantly Long



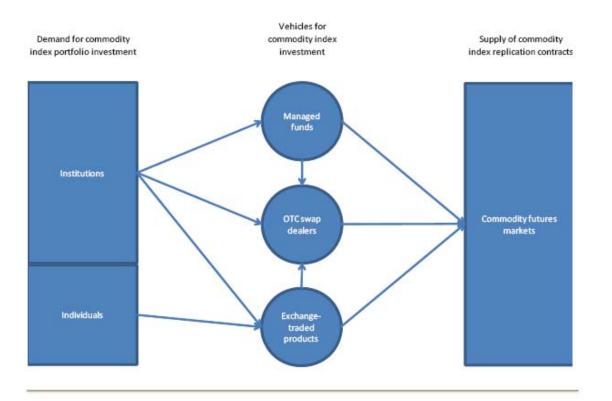
**NERA** 

# How do Investors Gain Exposure to Commodity Prices?



- Commodity index futures
- A portfolio of commodity futures contracts replicating the returns of a commodity index
- Privately-negotiated swaps
- Managed Funds (hedge funds and commodity pools)
- Exchange-traded products (so-called "commodity ETFs")

# Link Between End Users and Futures Markets



#### How Do Commodity Index-Linked Investments Find Their Way to the Futures Markets?



- Direct participation, i.e., establish futures positions in each of the index's component commodities, in proportion to the weight within the index
- Commodity swap dealers hedging their dealing risk with futures contracts

# How does the CFTC track this activity?



- The CFTC's Large Trader Reporting System will pick up the transactions under either scenario
- In the first instance the "reportable trader" would be the investment fund; in the second instance it would be the swap dealer
- Let me be clear: what the swap dealer reports to the CFTC is not his OTC transactions. The dealer reports his futures positions which are spawned by hedging his OTC transactions that facilitate end users

# Is the CFTC Really "Flying Blind?"



- OTC energy contracts are typically "NYMEX look-alike" contracts using the NYMEX futures price as the primary reference price
- OTC positions affect the futures price through the futures positions they spawn as OTC dealers hedge their dealing exposure to end users in the futures market
- The CFTC has the authority to look at the complete book of large futures traders, including related cash and OTC positions, if they have concerns

# Issues With Commodity-linked Investment



- Some market observers are concerned about longonly order flow
- In the past, federally-mandated speculative position limits on end users have driven volume through swap dealers. As a result, transparency of positions to the regulator is altered
- Swap dealers' participation in futures markets has increased as they hedge their dealing exposure to end users under a hedge exemption

### **Consequences on Commodity-Linked Investment in the Oil Market**



- Prior to 2004, trading activity was concentrated at the near end of the maturity spectrum
- Since 2004, trader positions at the back end of the maturity spectrum have increased significantly
- The market growth in long-term positions coincides with the growth in participation by commodity swap dealers in the futures markets

# Nearby and Backdated Futures Prices Have Converged



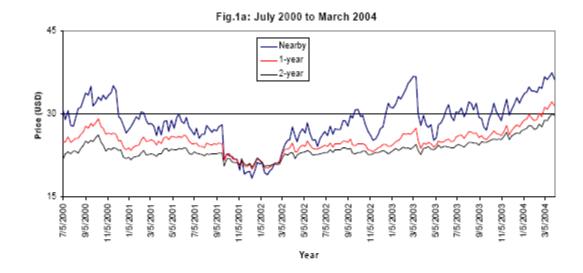
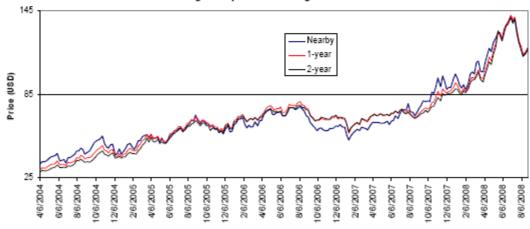
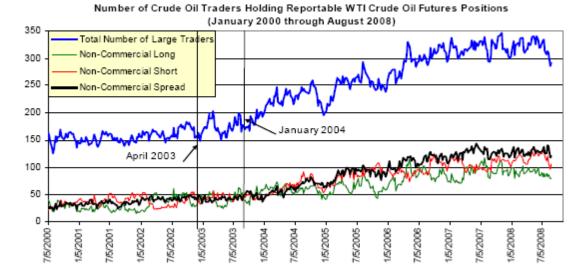


Fig.1b: April 2004 to August 2008

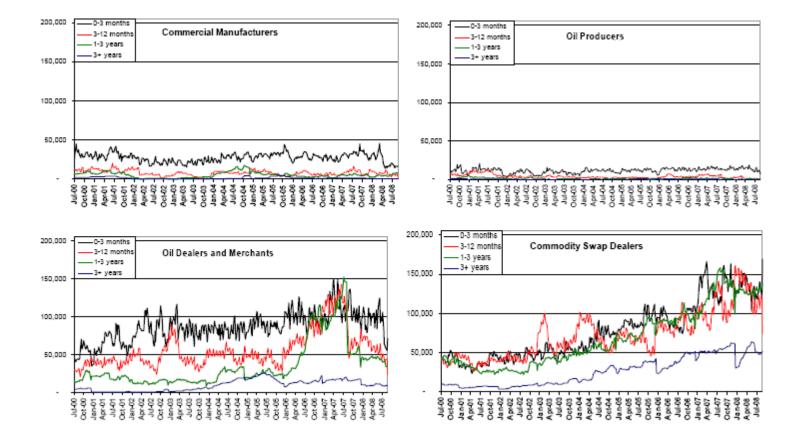


#### Number of Reportable Crude Oil Futures Positions by Trader Type



**NERA** 

# Participation Across Maturity Structure (Crude Oil Futures)

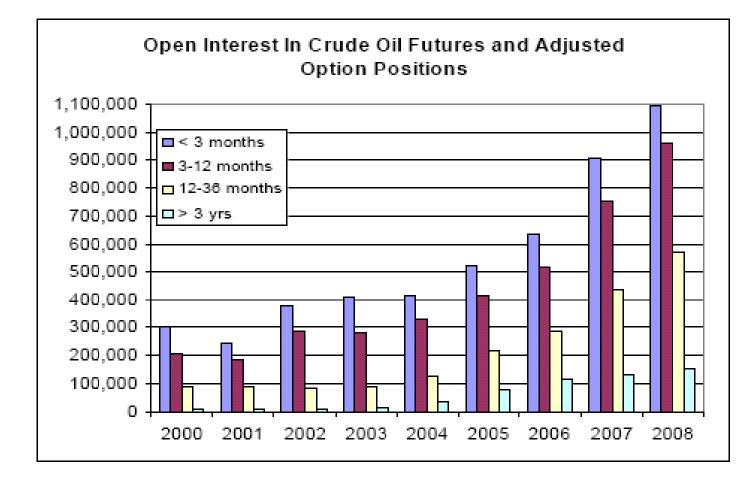


Source: Buyuksahin, et. al. (2010)

**NERA** 

# **Open Interest Across The Maturity Spectrum Across Time**





# Significance of the Result



 The convergence of nearby and backdated prices has significant implications for the effectiveness of hedges constructed with long-term crude oil futures contracts and for the quality of information contained in futures prices across the term structure

# **CFTC's Proposed Position Limits on Energy Products**

- Types of Speculative Position Limits
  - Spot Month
  - Non-spot month
  - All months combined
  - Accountability levels
  - Concentration limits

NERA

# Reasons Posited for Adopting Speculative Position Limits

- To mitigate clearinghouse risk
- To diminish, eliminate or prevent market manipulation
- To reduce price volatility caused by "excessive speculation"
- To influence price

NERA

# **Questions on CFTC Proposal**

- Is concentration a good proxy for conduct?
- Is concentration a good proxy for market power outside of the spot month in a market with no barriers to entry?
- What is "excessive speculation"?
- Are federal limits "necessary to diminish, eliminate or prevent" price distortions that burden interstate commerce"?
- What are costs associated with position limits?

# Implementation Issues with Position Limits



- Should there be a look through to ultimate position holders? Funds, including products like USO and UNG, can be viewed as aggregators of investor interest. Placing limits on the funds can make individual investors worse off
- Concentration position limits for each individual exchange may inhibit competition by impeding liquidity on a competing market and protecting market share of existing exchanges
- Operationally, how will positions across venues, jurisdictions, and related products be aggregated?





- "Fundamentals, Trader Activity and Derivative Pricing," Bahattin Buyuksahin, Michael S. Haigh, Jeffrey H. Harris, James A. Overdahl, and Michel A. Robe, SSRN 2008
- "Facts and Fantasies about Commodity Futures," Gary Gorton and K. Geert Rouwenhorst, SSRN 2005
- "Commodity Index Investing and Commodity Futures Prices," Hans R. Stoll and Robert E. Whaley, SSRN 2010





# **Contact Us**

#### James A. Overdahl, Ph.D.

Vice President NERA—Washington, DC +1 202 466 9256 james.overdahl@nera.com

> © Copyright 2010 National Economic Research Associates, Inc.

All rights reserved.