



**Ongoing Interagency and CFTC Research  
Agricultural Advisory Committee Meeting  
July 29, 2008**

**Jeffrey H. Harris**  
Chief Economist

# Office of the Chief Economist

- Research Objectives
  - Provide the Commission with information knowledge base
  - Systematic analysis of market functions
  - Utilize statistical and econometric expertise
- Support Role
  - Interface with Market Surveillance staff
  - Provide independent advice for Enforcement
  - Expert testimony (primary and second opinions)

# Interagency Task Force

- Partner with USDA, Treasury, Federal Reserve Board of Governors, Federal Trade Commission, and SEC
- Objective
  - Examine conditions in the commodity markets
- Price concerns, Volatility Concerns

# Interim study of Crude Oil Markets

- Demand
- Supply
- Macro factors
- Functioning of Futures markets 2003-08
  - Role of various traders and speculators
  - Term structure clues
- Statistical Tests
  - Correlations (price changes and position changes)
    - Not consistent over time
  - “Granger causality”
    - Little evidence

# Commodity Index Traders

- Mimic returns on broad class of commodities
  - Similar to stock index funds
  - Purchased by pension funds, etc.
  - Identified separately in 12 agricultural products
  - Flows estimated to be \$100+ Billion, '06-'08
- Portfolio Theory
  - Enhance return/risk when added to portfolios of stocks and bonds

## Major Commodity Index Composition and Weights (Feb 2008)

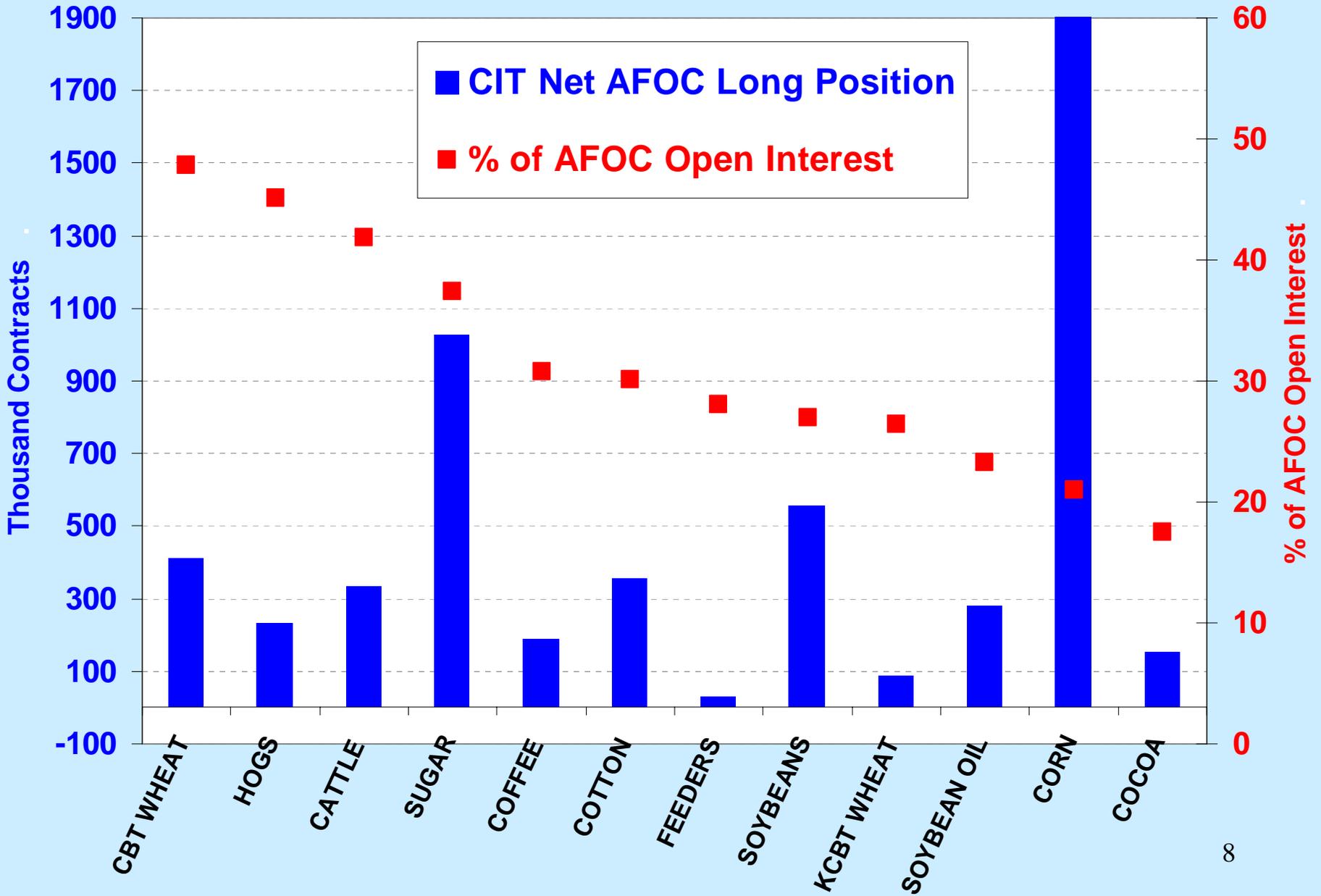
Commodities in the New COT Supplemental Report in Red

		GSCI	DJ-AIG	Rogers	DBLCI
<b>Energy</b>	<b>Brent Crude Oil</b>	13.2		14.0	
	<b>Gas Oil</b>	4.9		1.2	
	<b>Heating Oil</b>	5.0	3.8	1.8	20.0
	<b>Natural Gas</b>	6.9	12.2	3.0	
	<b>RBOB Unleaded Gas</b>	4.2	3.8	3.0	
	<b>WTI Crude Oil</b>	37.7	13.2	21.0	35.0
	<b>Metals</b>	<b>Aluminum</b>	2.7	7.1	4.0
<b>Copper</b>		3.3	7.0	4.0	
<b>Gold</b>		2.0	7.4	3.0	10.0
<b>Lead</b>		0.6		2.0	
<b>Nickel</b>		1.0	2.8	1.0	
<b>Palladium</b>				0.3	
<b>Platinum</b>				1.8	
<b>Silver</b>		0.3	2.7	2.0	
<b>Tin</b>				1.0	
<b>Zinc</b>		0.7	3.0	2.0	
<b>Ags</b>		<b>Azuki Beans</b>			0.5
	<b>Barley</b>			0.3	
	<b>Canola</b>			0.7	
	<b>Corn</b>	3.5	5.7	4.8	11.3
	<b>Feeder Cattle</b>	0.4			
	<b>Lean Hogs</b>	0.8	2.5	1.0	
	<b>Live Cattle</b>	1.8	6.1	2.0	
	<b>Oats</b>			0.5	
	<b>Red Wheat</b>	1.2			
	<b>Rice</b>			0.5	
	<b>Soybean Meal</b>			0.8	
	<b>Soybean Oil</b>		2.8	2.0	
	<b>Soybeans</b>	2.5	7.6	3.0	
	<b>Wheat</b>	4.7	4.7	7.0	11.3
<b>Softs</b>	<b>Orange Juice</b>			0.7	
	<b>Cocoa</b>	0.2		1.0	
	<b>Coffee</b>	0.7	3.0	2.0	
	<b>Cotton</b>	1.0	2.5	4.1	
	<b>Sugar</b>	1.1	3.2	2.0	
<b>Other</b>	<b>Lumber</b>			1.0	
	<b>Rubber</b>			1.0	
	<b>Wool</b>			0.3	

# Commodity Index Trading

- Little evidence that CIT positions affect price levels
  - No correlation between CIT market share and
    - price changes or
    - volatility
  - Supply of futures contracts is not fixed
- Some evidence that CIT positions *reduce* conditional volatility (ARCH models + roll period)
  - Rolling behavior provides liquidity

**Net Long Positions of CIT's for Commodities in the COT Supplemental**  
**All Futures and Options (Delta Adjusted) Combined on 7/22/08**



# Other Types of Speculators

- CFTC data identifies daily positions of:
  - Managed Money Traders (MMTs)
    - Hedge Funds
    - CPOs
    - CTAs
  - Floor Brokers/Traders
  - Other Non-reporting Traders
- Most Non-commercial traders are spread traders
  - Long September, Short December, for instance
- Do these “speculators” have an overall effect on prices?

## Net Speculative Positions (% of Open Interest)

	13-Nov	26-Feb	22-Jul
Crude Oil	<b>5%</b>	<b>6%</b>	<b>2%</b>
Gasoline	<b>23%</b>	<b>20%</b>	<b>18%</b>
Heating Oil	<b>12%</b>	<b>13%</b>	<b>7%</b>
Natural Gas	<b>-5%</b>	<b>-9%</b>	<b>-13%</b>
Electricity	<b>1%</b>	<b>1%</b>	<b>0%</b>
Gold	<b>34%</b>	<b>41%</b>	<b>35%</b>
Sugar	<b>9%</b>	<b>21%</b>	<b>13%</b>
Cocoa	<b>35%</b>	<b>32%</b>	<b>18%</b>
Coffee	<b>21%</b>	<b>25%</b>	<b>15%</b>
FCOJ	<b>21%</b>	<b>5%</b>	<b>19%</b>
Cotton	<b>24%</b>	<b>27%</b>	<b>20%</b>

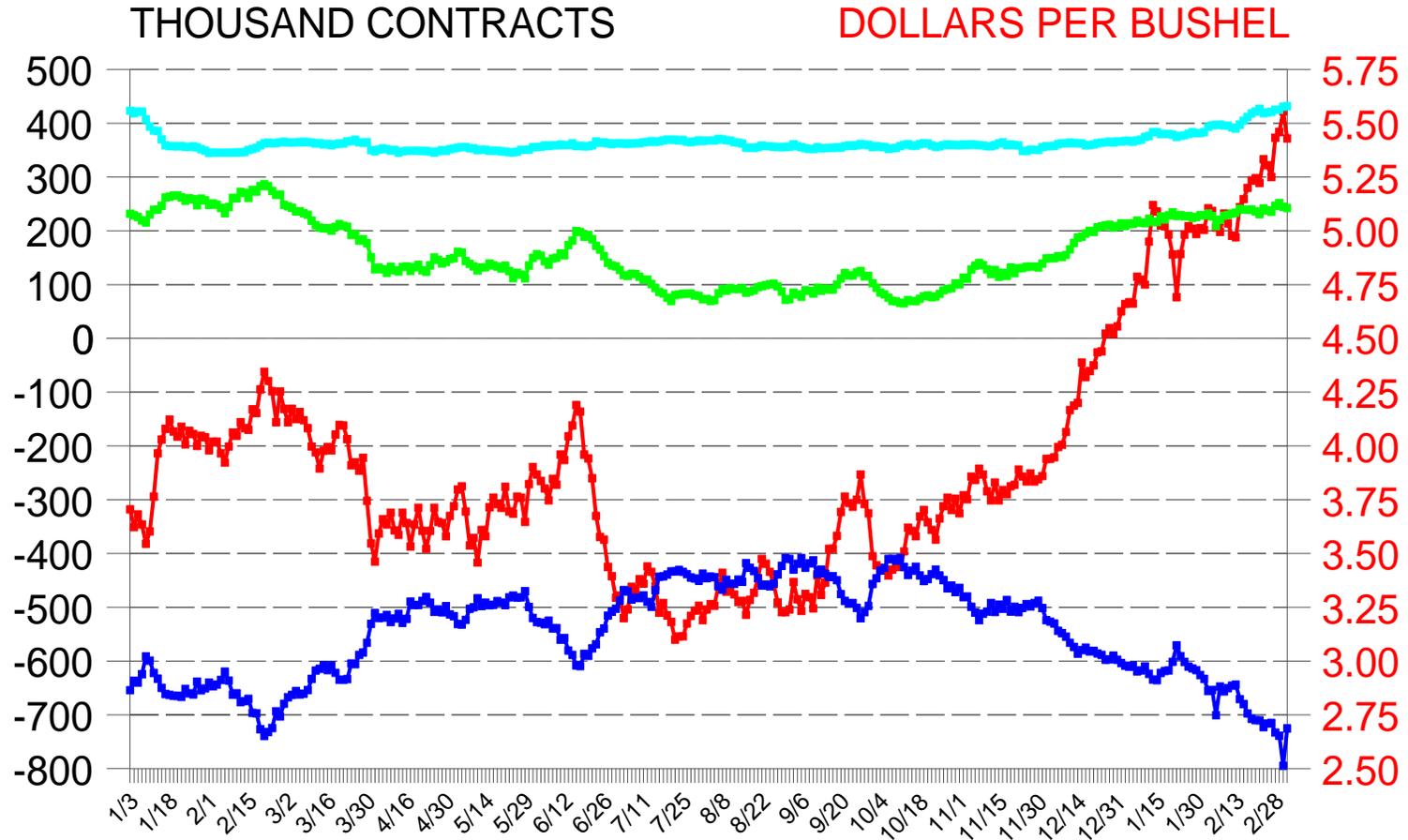
# Other Speculators

- Some positive correlations between MMT daily position changes and price changes
  - Causation?
- Little evidence of Granger causality
- Herding among MMTs
  - Counter-cyclical:
    - Buy herding when prices rise
    - Sell herding when prices fall

# CBOT Corn Market Composition January 2007 Through March 4, 2008

## Reportable AFOC Net Daily Positions

■ Commercial Merchants   
 ■ Managed Money Funds   
 ■ CIT   
 ■ CBOT Nearby Future

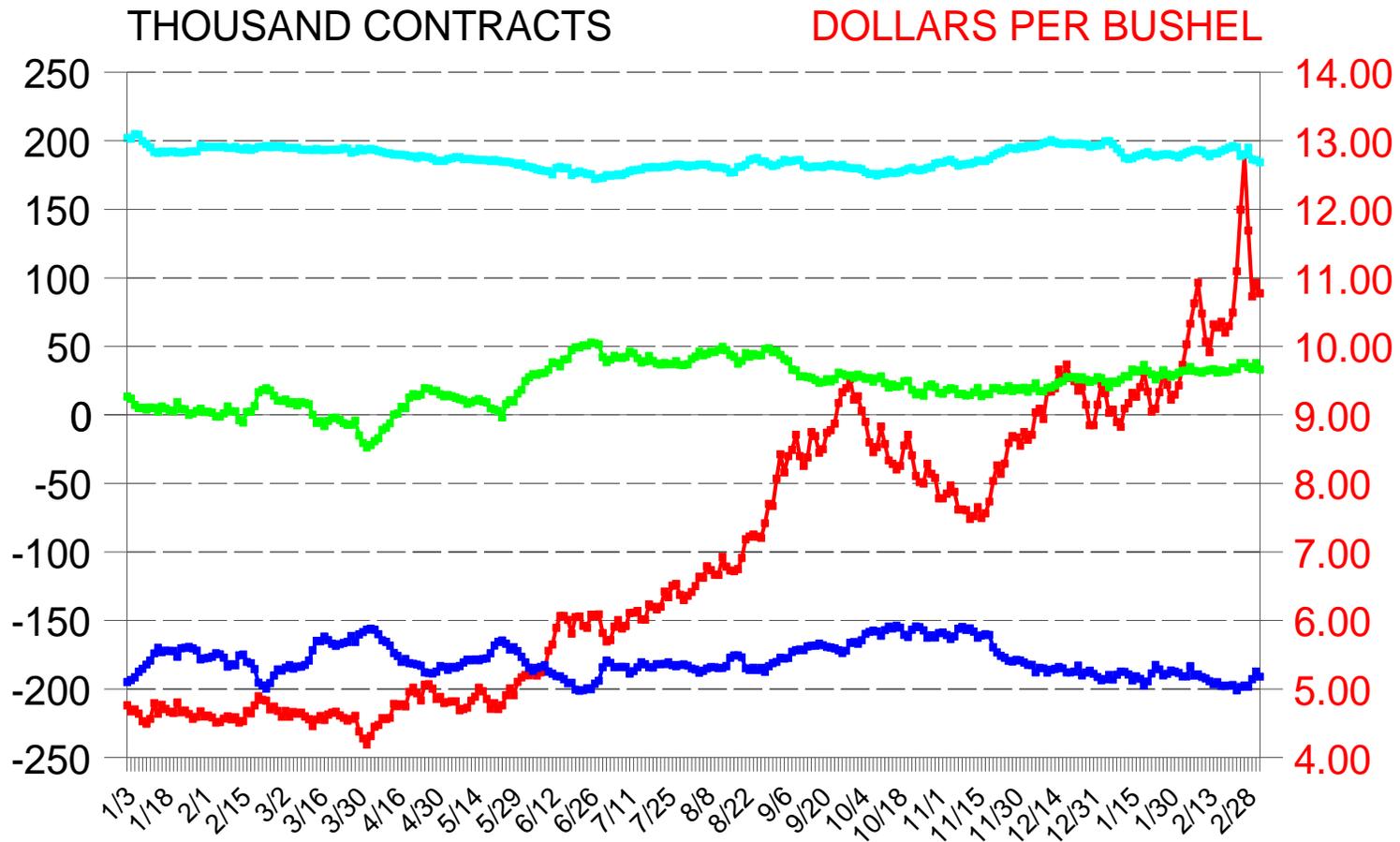


COMMERCIAL MERCHANTS = PHYSICAL HANDLER OF GRAIN  
 MANAGED MONEY FUNDS = REGISTRATION CODE OF CTA, CPO, OR MANAGED MONEY  
 CIT = COMMODITY INDEX TRADER

# CBOT Wheat Market Composition January 2007 Through March 4th, 2008

## Reportable AFOC Net Daily Positions

■ Commercial Merchants   
 ■ Managed Money   
 ■ CIT   
 ■ CBOT Nearby Future



COMMERCIAL MERCHANT = PHYSICAL HANDLER OF GRAIN  
 MANAGED MONEY = USE CODE OF CPO/CTA/MM  
 CIT = COMMODITY INDEX TRADER

# Summary

- Strong worldwide demand leading to higher prices
- Little evidence that speculative trading groups systematically leading to higher prices
- Some evidence that CIT positioning reduces volatility

# For Further Study

- How do open interest and prices respond to buying and/or selling pressure?
- What is interaction between futures and options market?
- What about CIT positions in non-ag markets?
  - Special Call results due in September '08
- Basic Science—Are CFTC classifications useful?