

# Fundamental Factors Affecting Agricultural and Other Commodities

Research & Product Development  
Updated December 31, 2008

# Outline

- **Review of key supply and demand factors affecting commodity markets**
- **World stocks-to-use levels for corn, wheat and soybeans**
- **Current events impacting corn, wheat and soybean prices**
- **Impact of U.S. dollar depreciation on commodity prices**
- **Global growth of agricultural futures market**
- **Index fund positions as a percentage of open interest**
- **Non-commercial positions and their correlations to price changes**
- **Margin and speculative position limits**

# Highlights

- **Our Markets are Working**
- **Many Factors Affect Commodity Prices**
- **Basic Supply and Demand Principles**
  - Weather and disease limiting supply
  - Growing demand from developing countries
  - Higher input costs related to increasing energy prices
  - Falling U.S. dollar
  - Biofuel production increases
  - Limited additional farmland in the short run
  - Restrictive export policies from some major exporters
- **No Evidence Index Funds or Non-Commercial Participation is Adversely Affecting Grain and Oilseed Markets**
  - Index fund participation has decreased or remained steady
  - Non-commercial participation in our markets has low correlations to recent changes in prices

# Agricultural Commodity Stocks Are Extremely Low

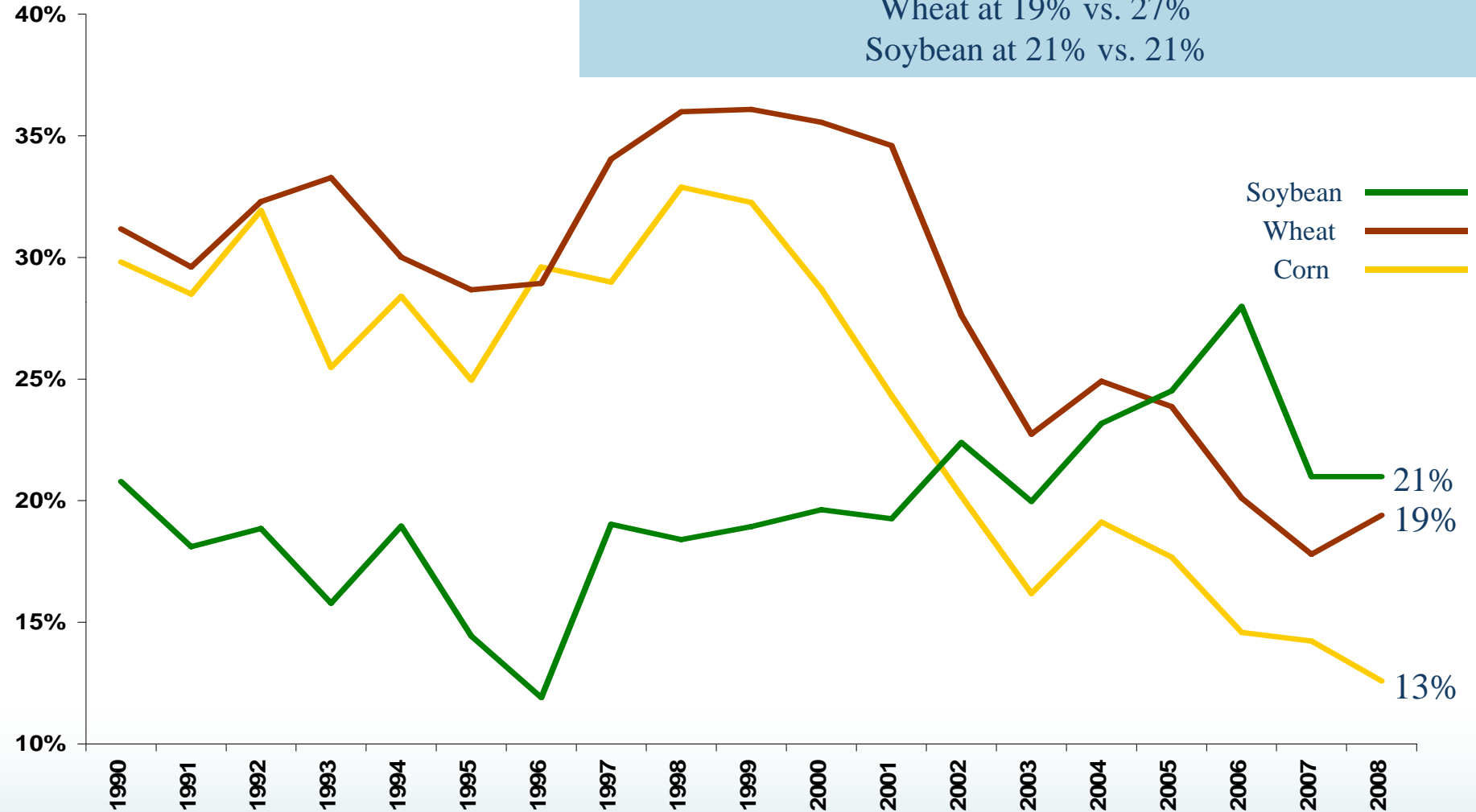
Current ratio versus the 10-year average ratio:

Corn at 13% vs. 21%

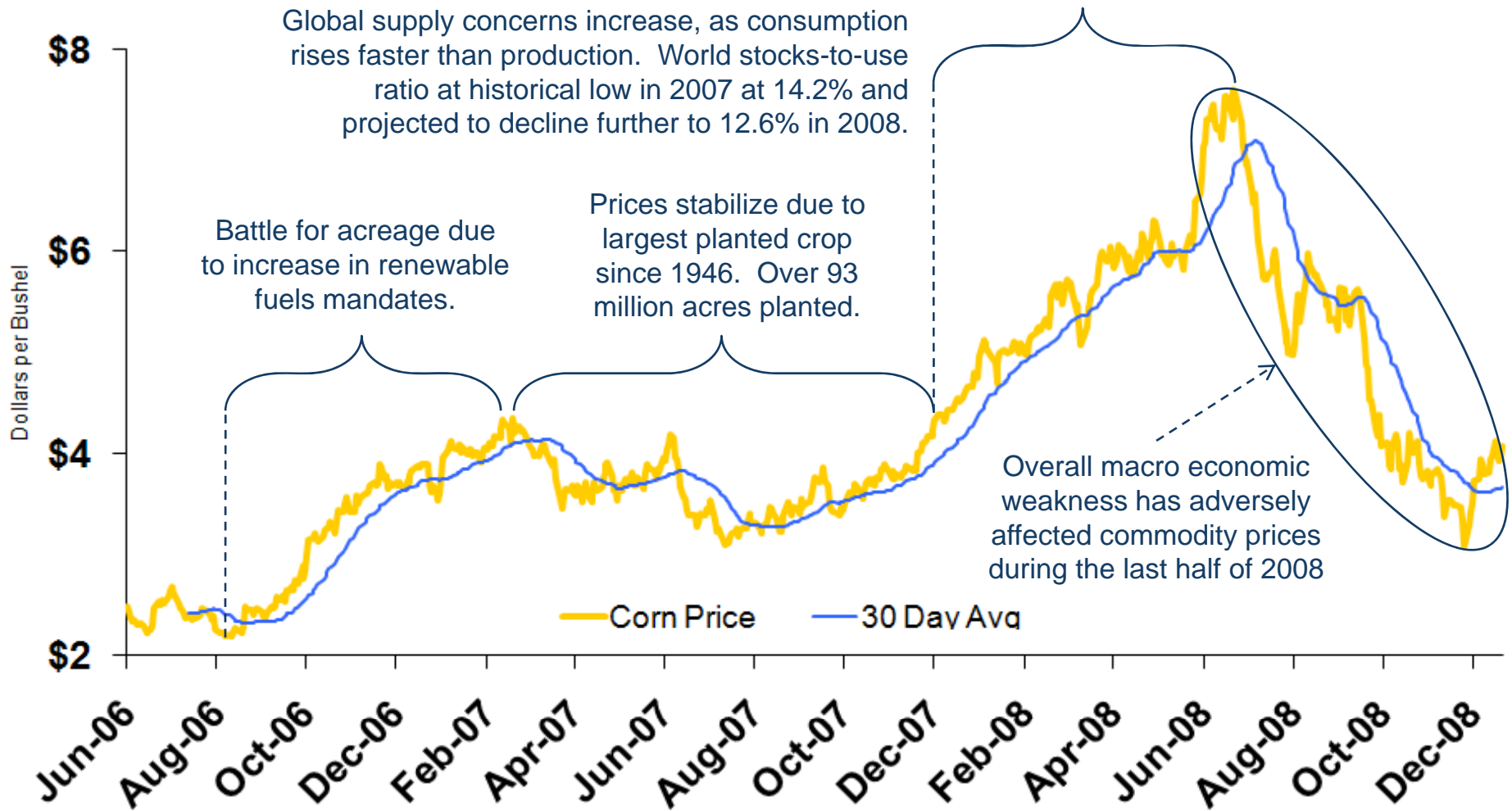
Wheat at 19% vs. 27%

Soybean at 21% vs. 21%

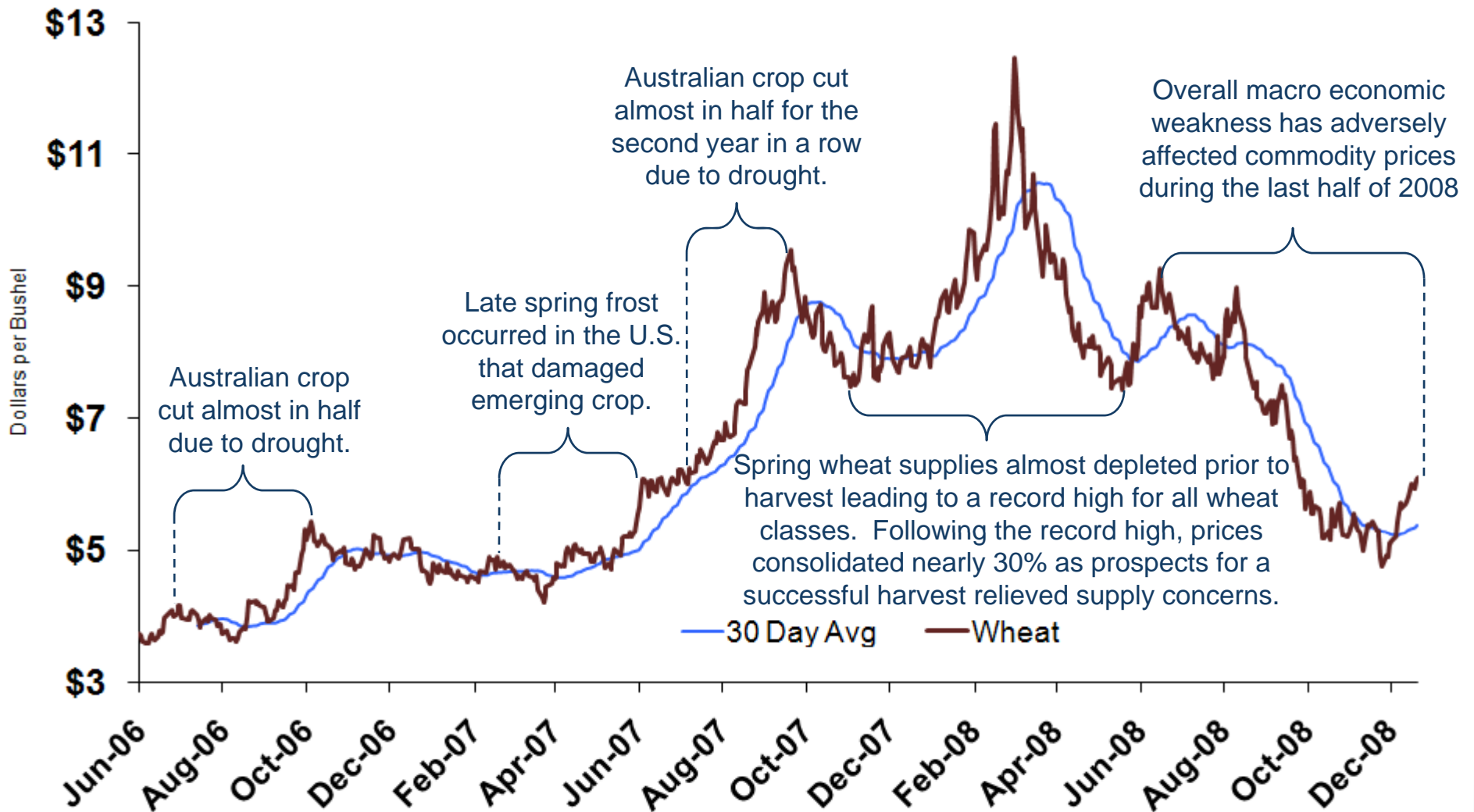
World  
Stocks-to-Use Ratio



# Events Impacting Corn Prices Since June 2006



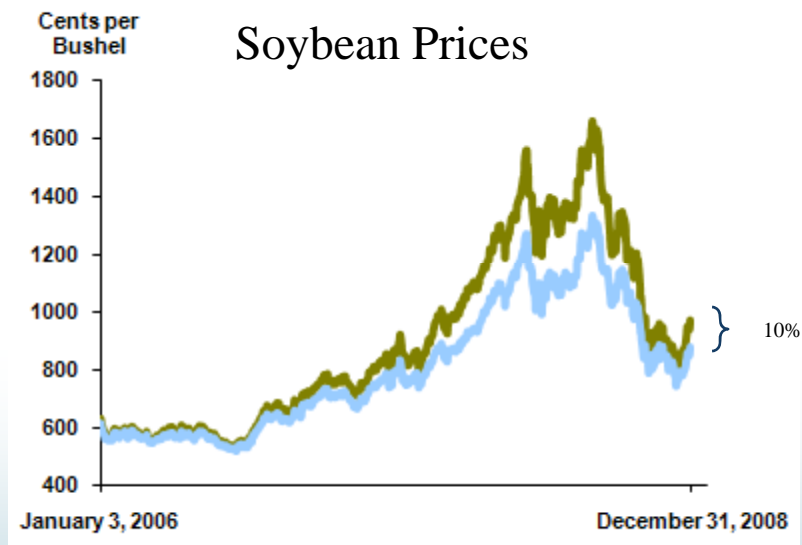
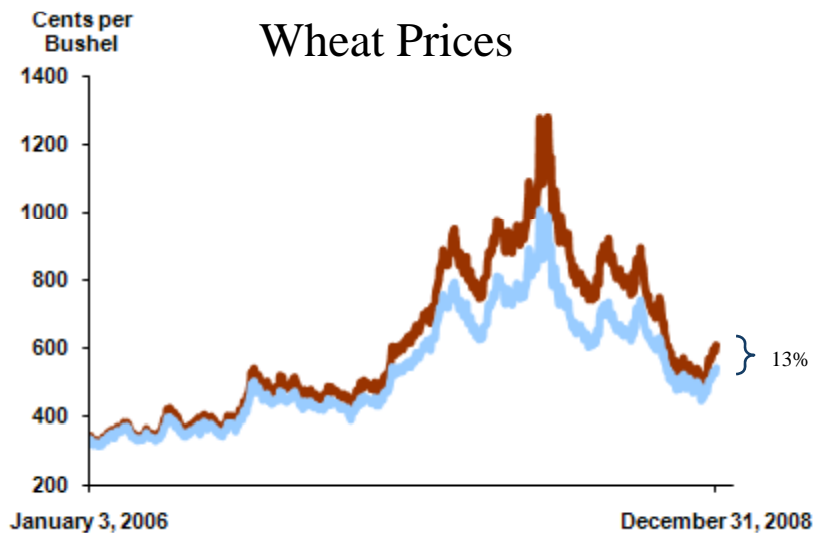
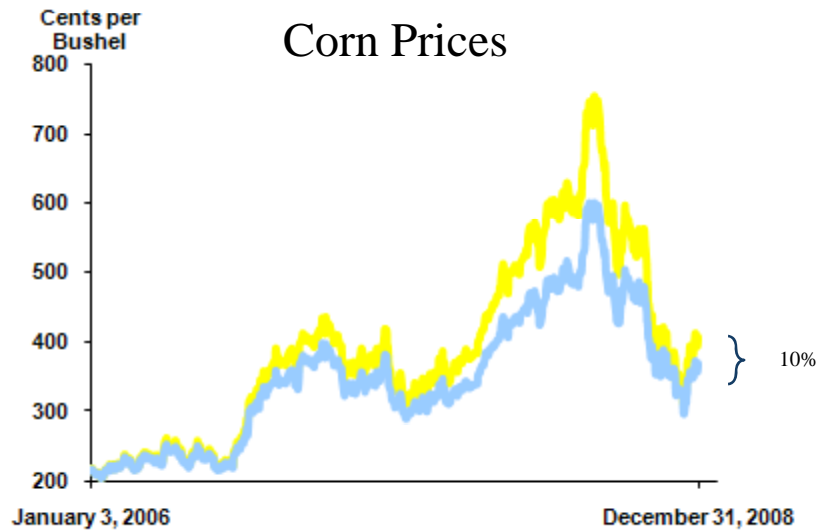
# Events Impacting Wheat Prices Since June 2006



# Events Impacting Soybean Prices Since June 2006



# Weak U.S. Dollar is a Key Driver of Increasing Commodity Prices



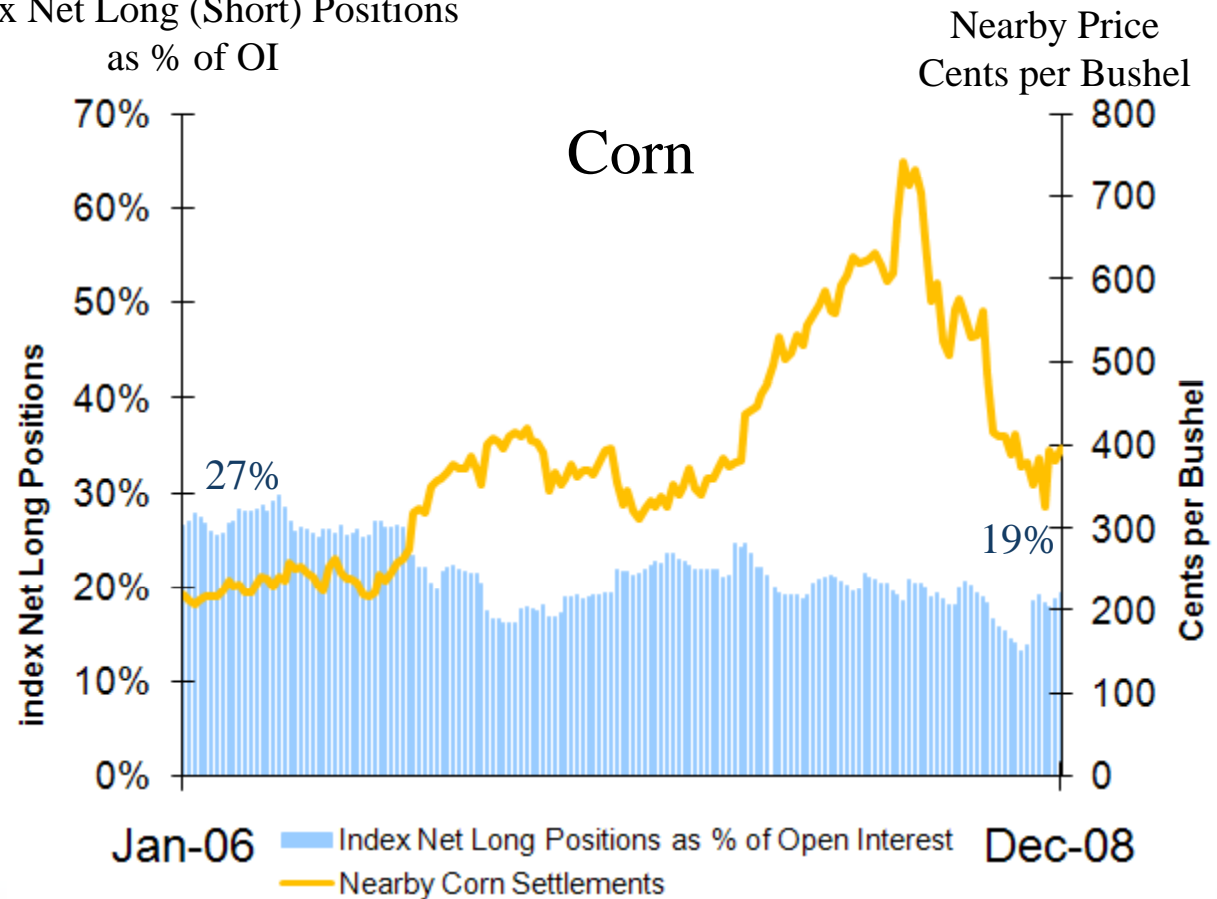
- Nearby Corn Futures
- Nearby Wheat Futures
- Nearby Soybean Futures
- Currency Adjusted (U.S. Dollar Index) Nearby Futures for each respective product

Corn, wheat and soybean prices would be at least **10 percent lower** if the U.S. Dollar had maintained its value from January 2006

# Index Fund Net Long Positions Have Decreased in Corn Futures Market

Though index fund positions as a percentage of open interest declined from 27% to 19% over the last three years, prices increased 80%. At one point prices were over 230% higher.

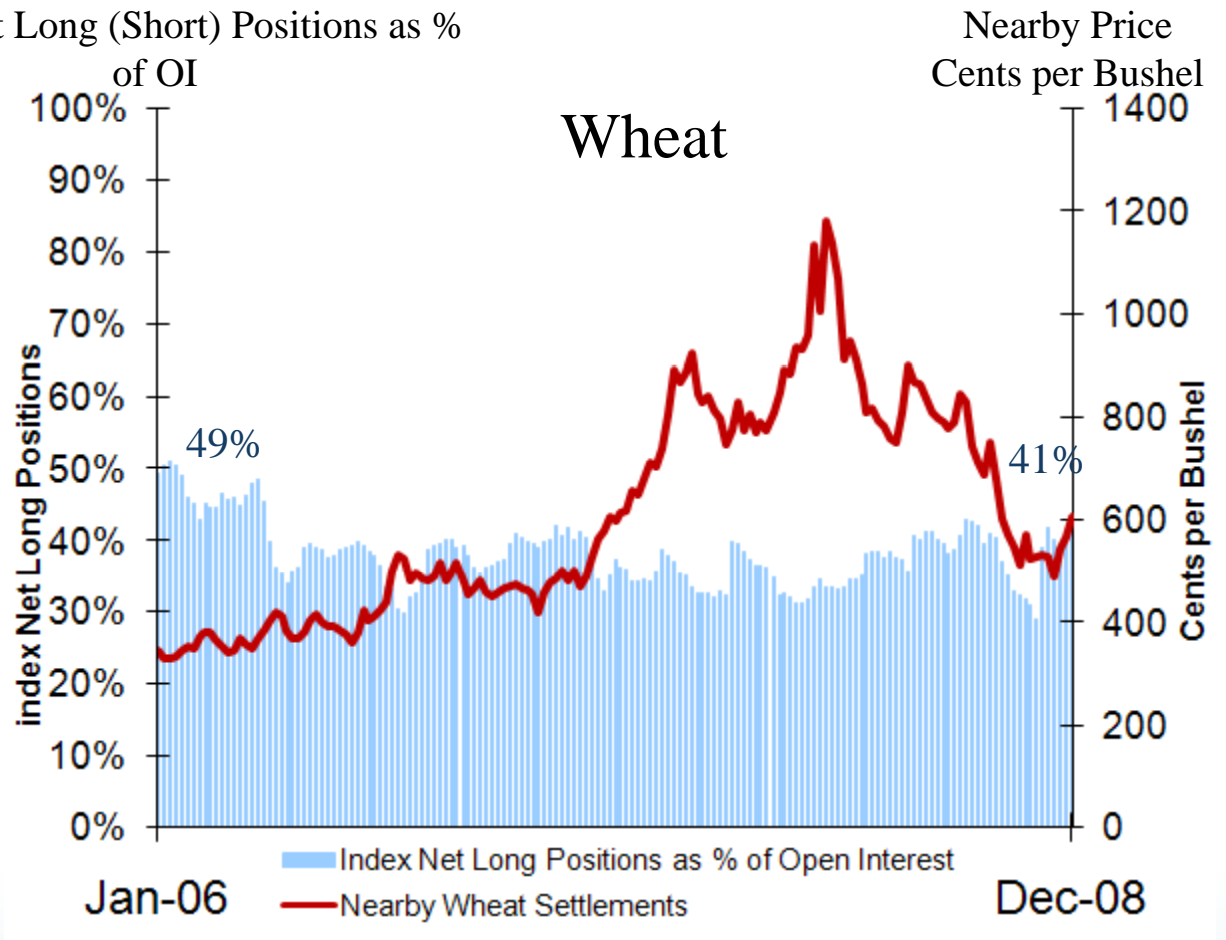
Index Net Long (Short) Positions as % of OI



# Index Fund Net Long Positions Have Decreased in Wheat Futures Market

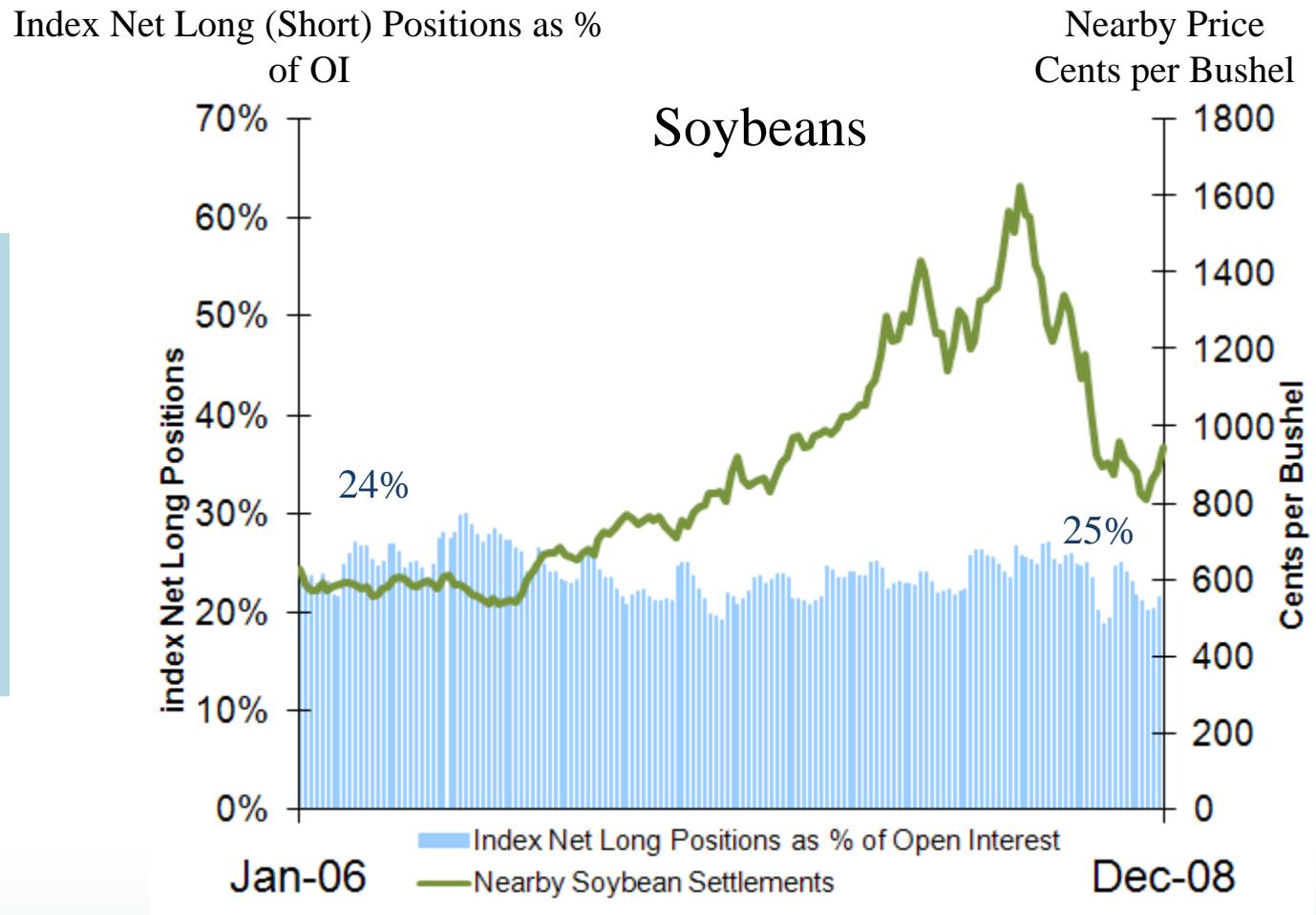
Though index fund positions as a percentage of open interest declined from 49% to 41% over the last three years, prices increased 75%. At one point prices were over 240% higher.

Index Net Long (Short) Positions as % of OI

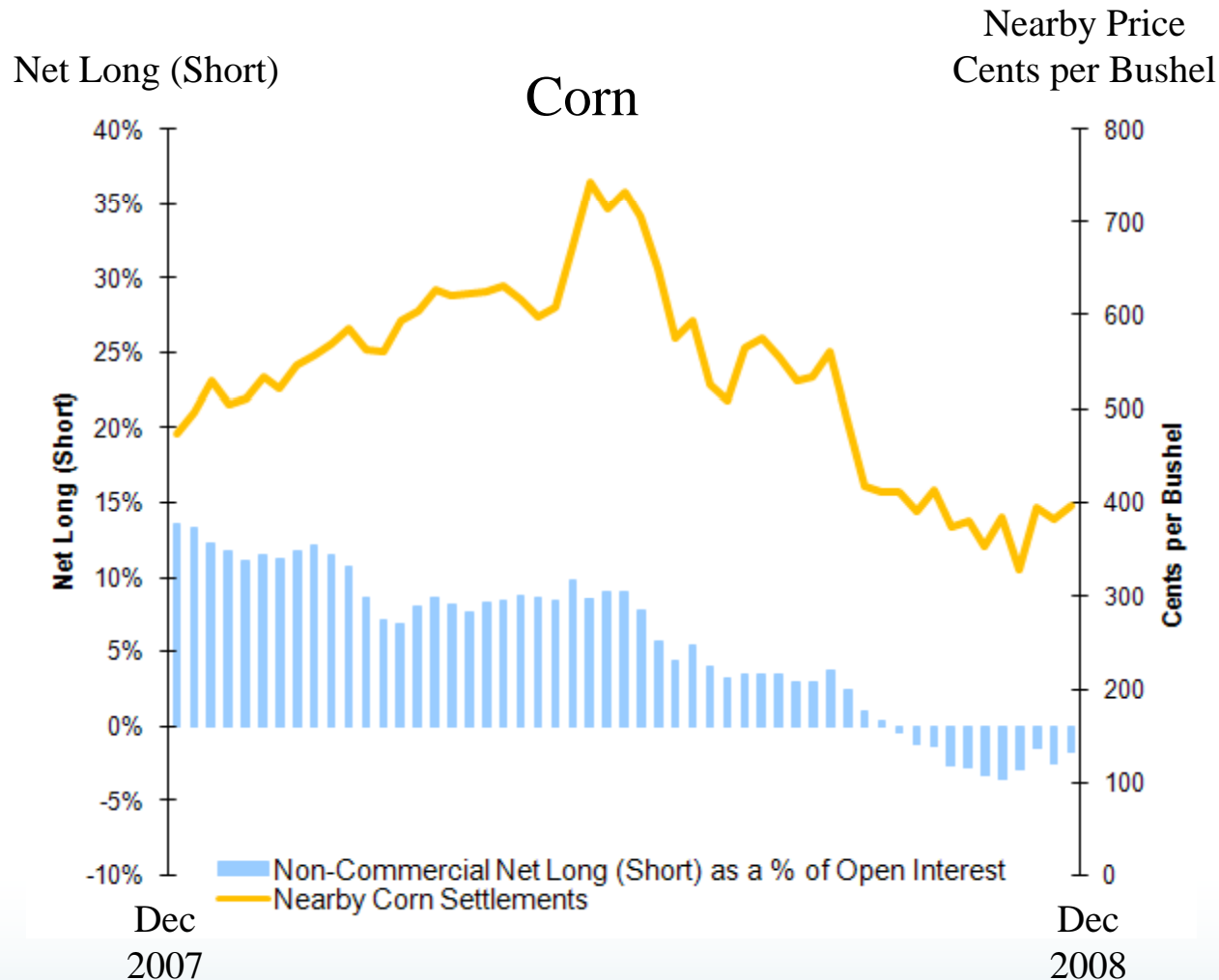


# Index Fund Net Long Positions Have Remained Steady in Soybean Futures Market

Index fund positions as a percentage of open interest increased slightly from 24% to 25% over the last three years while prices increased 50%. At one point prices were over 150% higher.

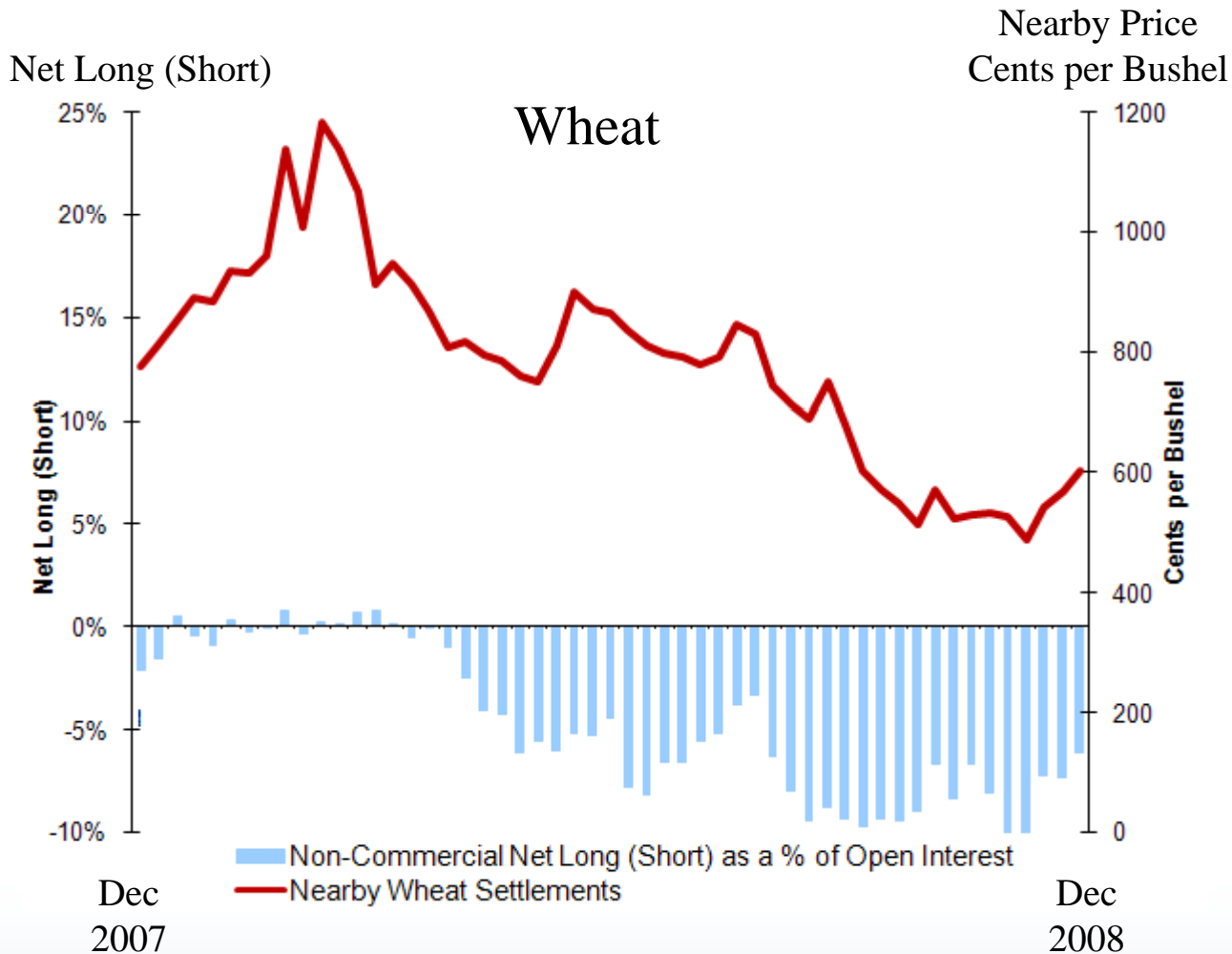


# Changes in Non-Commercial Positions in Corn Have Low Correlations to Price Changes



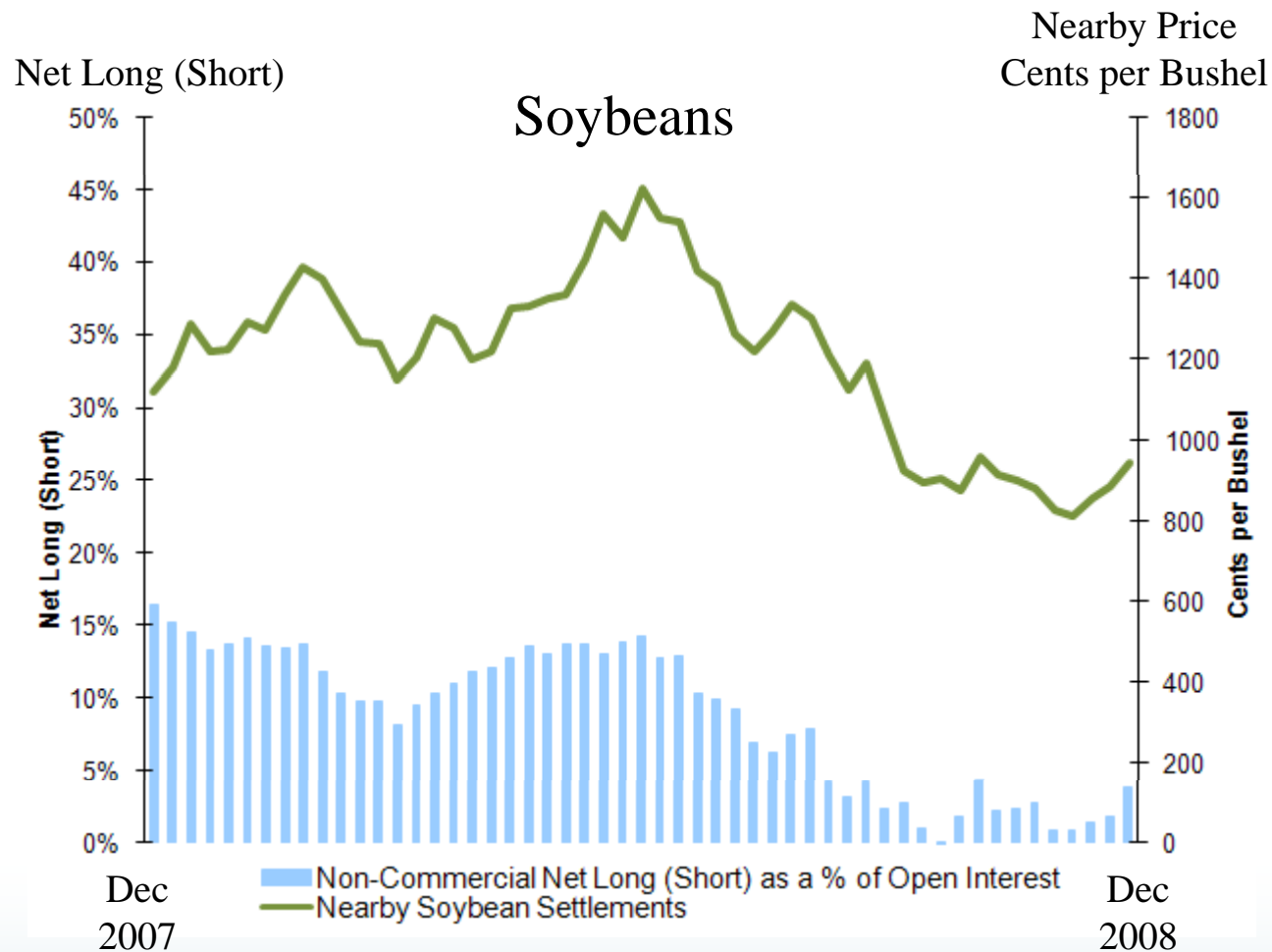
Non-commercial net long positions decreased as a percent of open interest even as the corn market rallied. The correlation between changes in their positions and price changes is 0.54.

# Changes in Non-Commercial Positions in Wheat Have Low Correlations to Price Changes



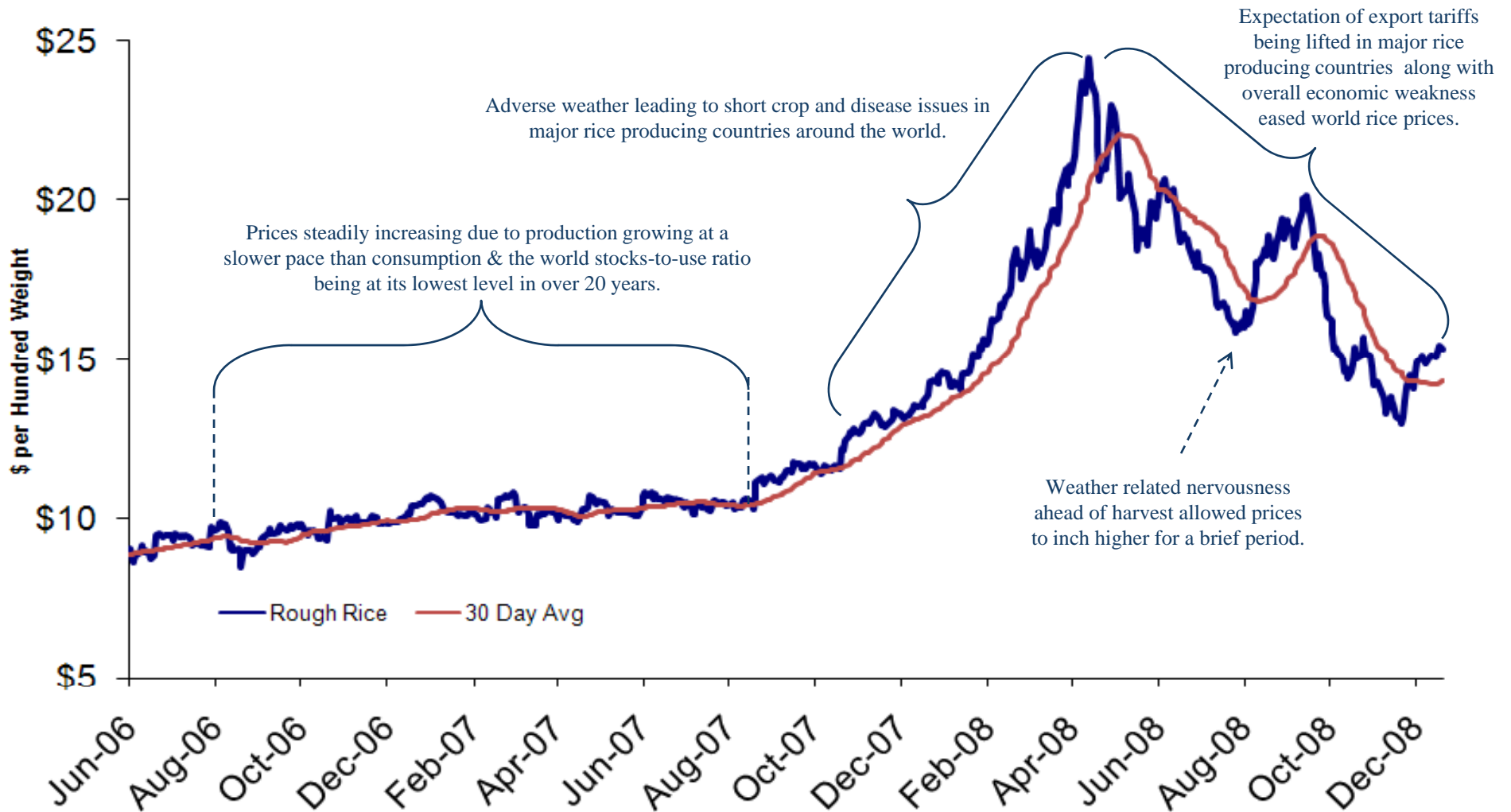
Net positions for non-commercial participants have changed several times over this period from being net long to net short. The correlation between changes in their positions and price changes is 0.41.

# Changes in Non-Commercial Positions in Soybeans Have Low Correlations to Price Changes



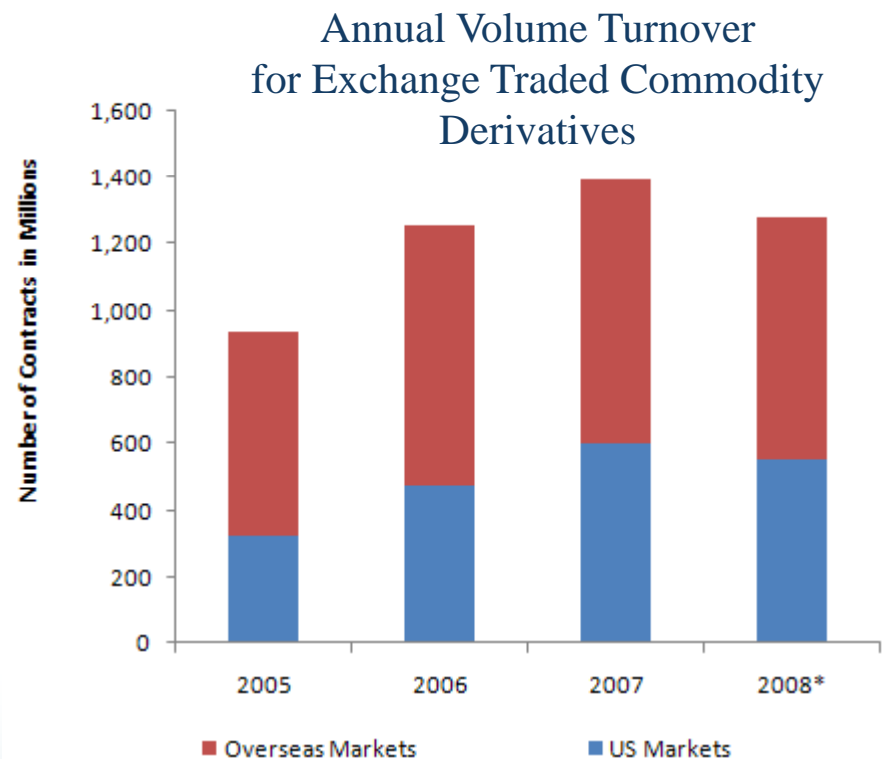
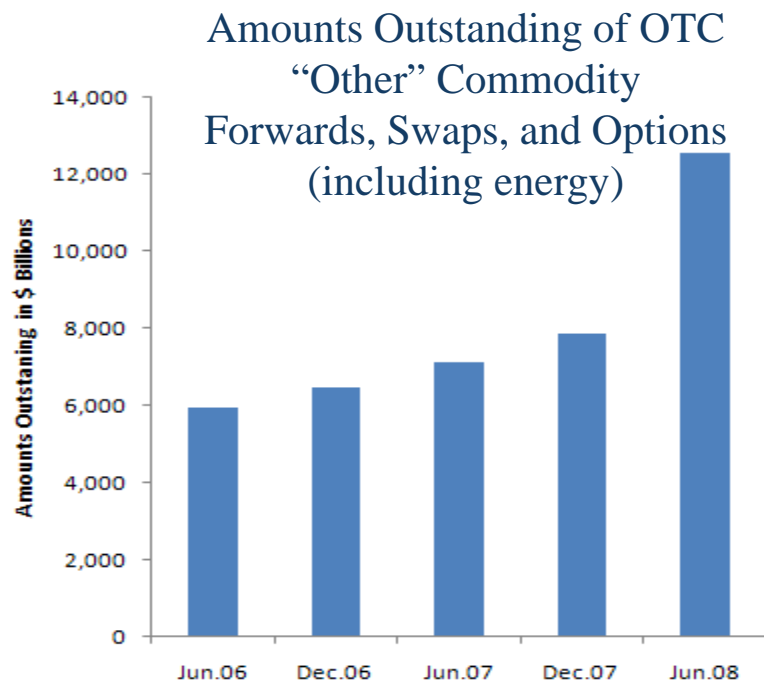
Non-commercial participants continue to hold net long positions in soybeans. The correlation between changes in their positions and price changes is 0.50.

# Rough Rice Prices Increase as Consumption Outpaces Production



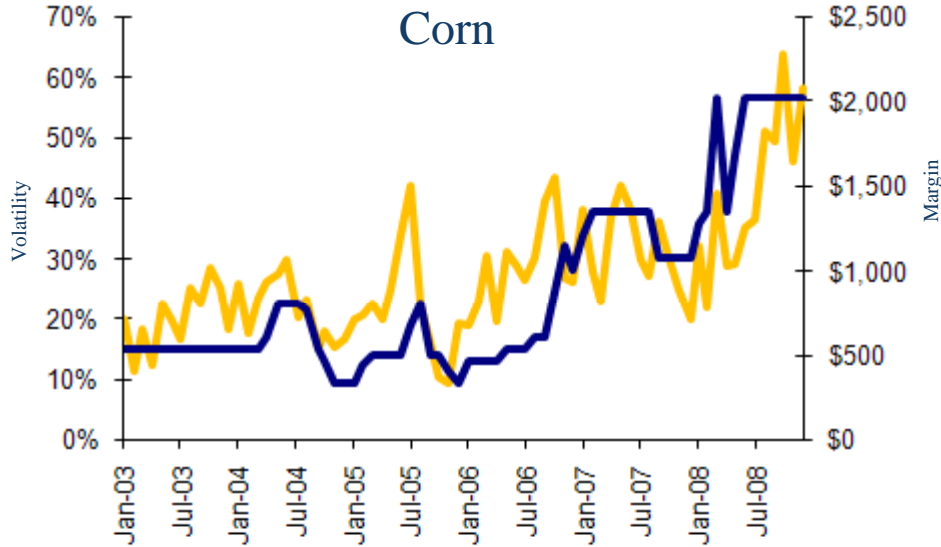
# Over Regulating US Commodity Markets Will Encourage Flow to the Already Active OTC Markets and Overseas Exchanges

- 112% growth in OTC commodities in two years while overseas exchange traded commodity market is now 57% of global annual volume
- OTC commodity market is estimated at 5 times the size of the exchange traded commodity market



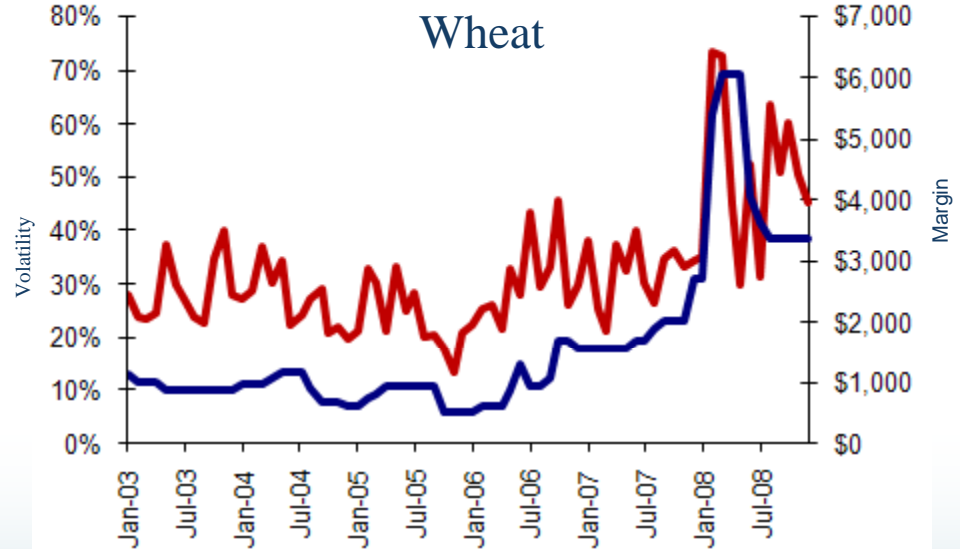
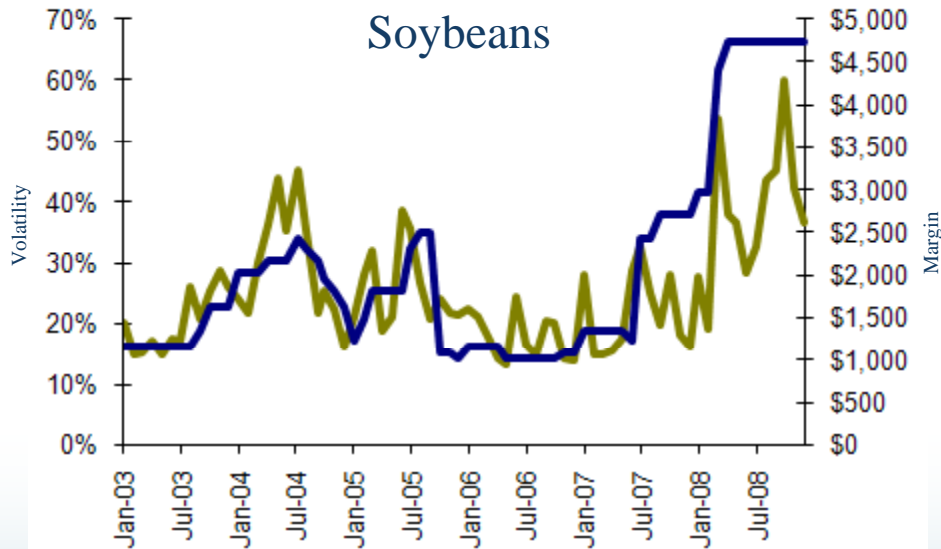
\*Through September 2008

# Margin Levels Have Increased As Annualized Volatility Has Increased

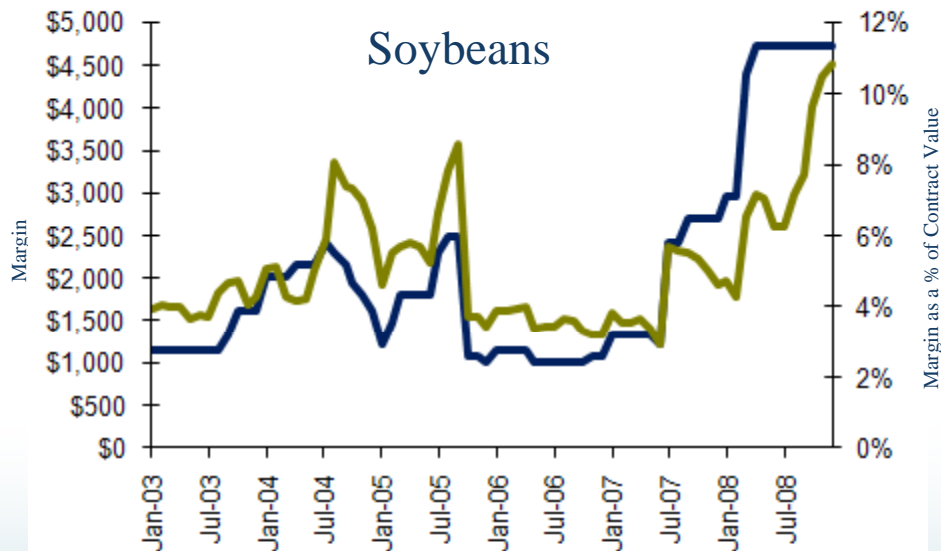
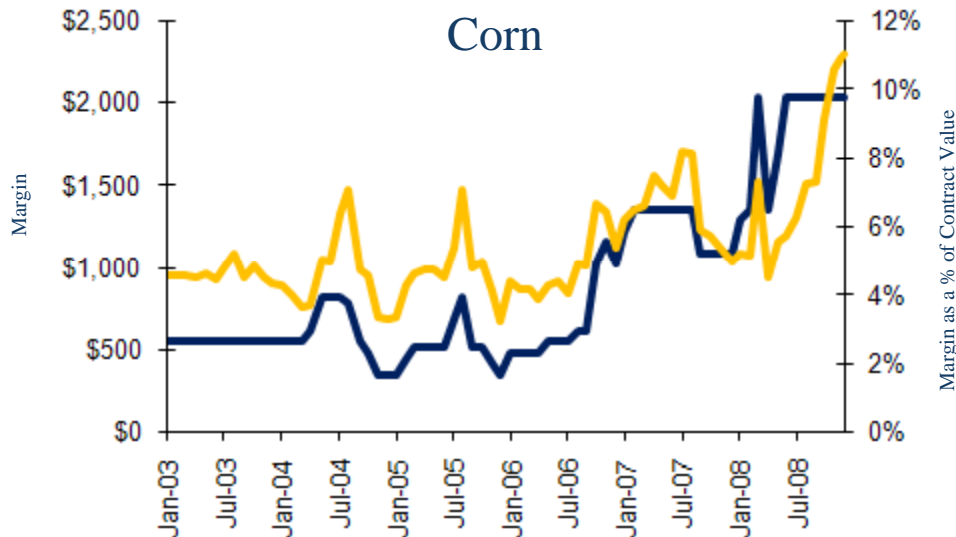


Margins are highly correlated with price volatility, which has been at record highs given low stocks-to-use ratios and growing global demand.

- Corn Volatility
- Wheat Volatility
- Soybean Volatility
- Margin

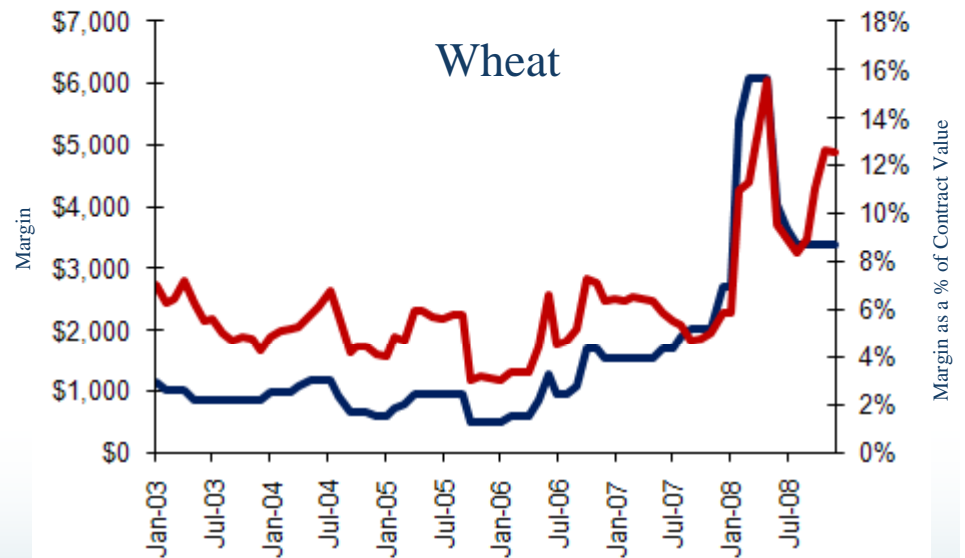


# Margin Levels Have Already Been Increased



- Margins as a % of contract value increased 142% in corn, 79% in wheat and 175% in soybeans since Jan '03.
- Currently, margins as a % of contract value are 11.05% in corn, 12.54% in wheat and 10.85% in soybeans.

- Corn Margins
- Wheat Margins
- Soybean Margins
- Margin as a % of Contract Value



# Speculative Position Limits for Ag Markets Have Not Increased Since December 2005

- Speculative position limits are federally mandated in CFTC Reg 150.2. They are determined by a formula and have not been increased since Dec 2005<sup>1</sup>.
- Spot Month speculative limits have not changed during this time. They are 600 contracts for Corn, Soybeans, Wheat, and Oats; 540 contracts for Soybean Oil; and 720 contracts for Soybean Meal.

	Single Month Position Limits				All Months Combined Position Limits			
	Prior July '99	July '99 - July '05	July '05 - Dec '05	Post Dec '05	Prior July '99	July '99 - July '05	July '05 - Dec '05	Post Dec '05
Corn	3,400	5,500	9,500	13,500	5,000	9,000	15,500	22,000
Soybeans	2,400	3,500	5,000	6,500	4,000	5,500	7,750	10,000
Wheat	2,100	3,000	4,000	5,000	3,200	4,000	5,250	6,500
Oats	900	1,000	1,200	1,400	1,200	1,500	1,750	2,000
Soybean Oil	2,000	3,000	4,000	5,000	3,100	4,000	5,250	6,500
Soybean Meal	2,200	3,000	4,000	5,000	3,400	4,000	5,250	6,500

<sup>1</sup> Single month and all month combined speculative position limits must be no greater than 10% of the average combined futures and delta adjusted month end open interest for the most recent calendar year up to 25,000 contracts with a marginal increase of 2.5% of the remaining open interest thereafter.

# Summary

- **When basic supply and demand principles are studied, it is clear that many factors affect commodity prices**
- **There is no evidence that the participation of non-commercials is adversely affecting grain and oilseed markets**
  - Speculators help form efficient, liquid markets
  - Speculators have continued to hold relatively constant percentages of open positions in most markets
- **CME Group's commodity products serve as the benchmark for the world and these markets are working**
- **Speculative position limits for ag products are federally mandated and have been unchanged since December 2005**
- **Over regulating US markets will encourage additional flow to growing OTC commodity markets and overseas exchange traded commodity products**
- **CME Group's commodity products serve as the benchmark for the world and these markets are working**