

Futures Markets, Speculation and the Impact on Commodity Prices

A Chicago Perspective

Dr. Frank S. Rose
Lewis University, U.S.A.



Outline of the Presentation

- Economic value of futures
- Trends in global futures markets
- Futures market mechanics – eight points to remember
- The current debate on the role of speculation
- Academic perspectives
- Regulatory perspectives
- Considerations in formulating a response

Economic Value of Futures Markets

- Price discovery
 - Central market brings together ...
 - Different perspectives on value
 - Different sources of information
 - Cash markets are often fragmented
 - Provides a publicly available price signal
- Risk management
 - Hedgers want to transfer their price risk
- Investment/speculation
 - Investors/speculators are willing to take the price risk
 - Complete markets
 - Liquidity
- My bias
 - 20 + years at the Chicago Board of Trade

Trends in Global Futures Markets

- Trading volume is increasing
 - 2004: 3.5 billion contracts
 - 2008: 8.3 billion contracts
 - But, volume is 11% lower in 2009 (Jan. – June)
 - Non-U.S. trading significantly exceeds U.S. trading
- Transition from open-outcry to electronic trading
 - Increased access
- Exchange mergers
 - Greater liquidity
- New exchanges being established/considered
 - Products tailored to specific regional needs
- Increased focus on the value of the exchange clearinghouse
 - Response to credit risk in OTC markets

Futures Market Mechanics – Eight Points To Remember

- 1. Cash market product (for example, corn) is not traded**
Legal agreements – “contracts” – are traded
- 2. Contracts are created by the futures market traders**
Buyer is obligated to take delivery of product in the future
Seller is obligated to make delivery of product in the future
- 3. However, most contracts are offset before they expire**
So, delivery of the cash product seldom occurs
- 4. Since delivery seldom occurs, the number of contracts created is not limited by actual production**

Futures Market Mechanics (Cont.)

5. **The price of the futures contract reflects the value of the product**

For example,

Buyer contractually agrees to buy corn at \$3/bushel

Corn price rises to \$4/bushel

Buyer's futures contract is more valuable

6. **Futures prices and cash prices are linked**

For example, are futures prices too high relative to cash?

Arbitrage ...

Buy cash product

Store it

Deliver it in the futures market

Futures Market Mechanics (Cont.)

7. **Futures contract terms are specified by the exchanges**

Delivery area and product grade are not negotiable by traders

Futures contract prices reflect supply and demand in
that delivery area and that product grade

8. **Futures markets are not a good source of cash product**

Why?

Delivery must occur in the contract-specified delivery area

So, want to buy/sell the cash product?

Use normal commercial channels

Want to manage price risk?

Use futures markets

The Current Debate on the Role of Speculation

- Is there too much speculation in the agricultural futures markets?

Price bubbles? Increased volatility?

- Long-standing debate

- What's different now?

More sophisticated investors; more knowledge of futures

New portfolio diversification strategies

Greater interest in the commodities asset class

Index trading – “long only” trading

New participants

Swap dealers and users

Low cost of using futures to implement strategies

The Current Debate on the Role of Speculation (Cont.)

- What's different now? (Cont.)
 - Greater access to futures – electronic trading
 - Larger pools of capital
 - More market-making capacity at futures exchanges
 - Greater appreciation of the value of exchange clearinghouses
 - Invest without credit risk
- A particular current concern – price spikes in 2008
 - Did speculative buying cause futures prices to exceed fundamental values?
 - If so, what were the impacts? What should be the response?

Academic Perspectives

- All agree that speculative buying in futures has grown dramatically
 - Long futures positions held by non-commercial and index traders peaked in 2008
 - ... but what is the impact on prices?
- Conceptual differences regarding the cash – futures price relationship
 - Futures a zero-sum game; no limit on number of contracts
 - Speculative futures buying \neq demand for product
- Historical analyses
 - Current levels of speculation – within historical norms
 - Speculation vs. hedging levels – within historical norms

Academic Perspectives (Cont.)

- Studies of cause and effect (Granger causality tests)

Is there a statistically significant relationship between changes in long speculative positions and futures price movements?

Mixed results

Does correlation indicate causality?

- Studies of fundamentals

Did supply and demand factors drive prices up?

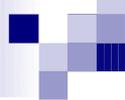
Then, did the global recession bring prices back down?

- Poor futures market performance may be caused by other factors

The case of CBOT Wheat futures

Regulatory Perspectives

- Is increased U.S. regulation inevitable?
- U.S. Commodity Exchange Act
 - Directs Commodity Futures Trading Commission to ...
 - Prevent “excessive speculation”
 - Maintain position limits for speculators
- CFTC responses
 - Over the years ...
 - Expanded position limits
 - Provided exemptions from position limits
 - September 2008 study – Swap dealers and index traders
 - Data enhancements



Regulatory Perspectives (Cont.)

- Congressional proposals

 - 2008 proposal to ban institutional investors from commodity markets

 - Increase position limits in futures

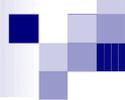
 - Greater regulation of OTC derivatives

 - Registration of swap dealers

 - Require central clearing

 - Move standardized OTC transactions to exchanges

- Similar proposals in Europe

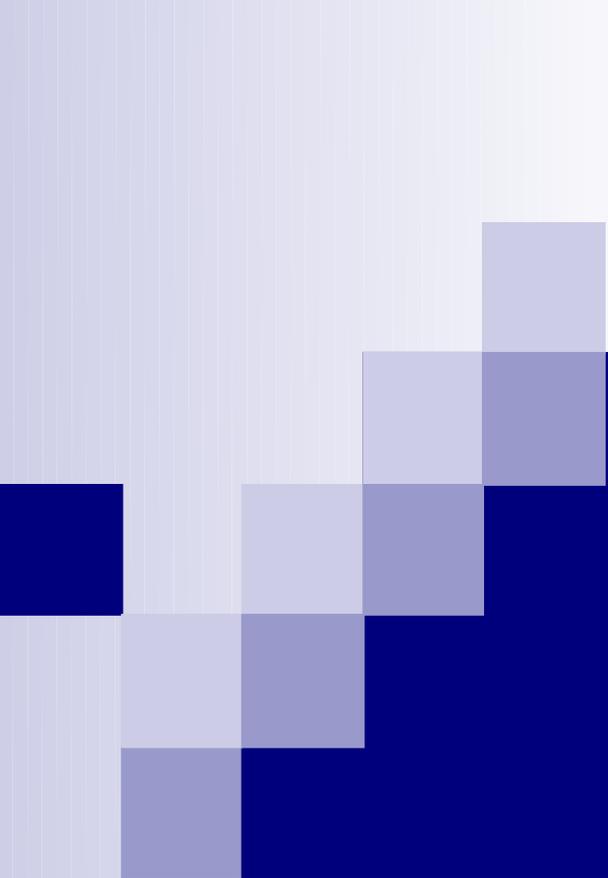


Considerations in Formulating a Response

- The economic value of these markets
 - Effect of reducing liquidity?
- The greater sophistication of today's financial markets
 - Effect of limiting investment in regulated markets?
- Long history of the debate
 - Yet, futures volume and number of exchanges increasing

Considerations in Formulating a Response (Cont.)

- Futures prices are readily available, transparent
 - When prices rise (or fall) → some benefit, others do not
- Understanding of the futures markets
 - What they are, what they are not
 - How the cash price – futures price link works
 - Importance of rigorous analysis of market performance
- Futures exchanges are businesses
 - If customers do not like the product/service, they will go elsewhere



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