

## 附錄三

### 研討會相關資料

# The Challenge of Hedge Fund Regulation

2009 CFTC Chicago Symposium  
October 19, 2009

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## I. Why the call for regulation? (Michael Nelson\*)

- Existed before the financial crisis
- Hedge Funds seen by some as exacerbating financial crisis (true?)
- The mystery surrounding hedge funds

\*The views expressed in Michael Nelson's presentation are those of the author and should not be attributed to any entity in the Federal Reserve System.

## II. Hedge Fund Perspective (Darcy Bradbury)

- Global industry size and composition\*
  - Over \$1.4 trillion in assets
  - Over 6,700 hedge funds + 2,200 funds of funds
  - Majority of investors are institutional
- US industry size and composition\*\*
  - Roughly 70% of global hedge fund assets
  - 205 firms with >\$1 billion in assets
    - 134 of which are voluntarily registered with the SEC
    - SEC-registered firms manage over \$700 billion

\*As of June 2009

\*\* As of August 2009

## III. IMF Perspective (Issac Lustgarten\*)

- Policy Objectives
  - Mitigate Systemic Risk, Promote Financial Stability
  - Investor Protection
  - Bolster Anti-Money Laundering
  - Curb Market Abuse
- Other Policy Considerations
  - "Location" of fund
  - Operating Conditions
  - Capital Requirements
  - Marketing of Funds
  - Governance Requirements

\*The views expressed in Isaac Lustgarten's presentation are those of the author and should not be attributed to the International Monetary Fund, its Executive Board, or its Management.

U.S. Commodity Futures Trading Commission  
International Symposium and Training Program

## **Market Surveillance Issues How Regulators Detect, Deter, and Combat Market Abuse**

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Chicago, IL  
Tuesday, October 20, 2009

### Overview



- **Mission of Market Surveillance**
- **Market Disruptions**
  - Corners and Squeezes
  - Disorderly Trading and Liquidations
- **Market Monitoring**
  - Surveillance Tools
  - Commission and Exchange Responses
- **Case Study**
  - Ferruzzi Finanziaria S.p.A.

## Market Surveillance



- Exchange Level – monitors market participants, examines futures and cash markets daily, and enforces exchange rules.
- CFTC Level – monitors large traders' activities, examines key price relationships, and enforces CFTC regulations.
- Customer or Trader Level – reports suspicious activity to exchange and/or CFTC.

## Primary Surveillance Mission



- To identify situations that could pose a threat of manipulation and to initiate appropriate preventive actions.
- To develop tools to detect adverse situations as they are developing, before the market can be disrupted.
- Maintain a strategy to deal with potentially disruptive situations.

## Defining Manipulation



- Ability to influence market prices (market power).
- Specific intent to create artificial prices.
- Existence of artificial prices.
- Manipulator caused artificial prices.

## Corners and Squeezes



- Corner – a situation where someone owns or controls enough of the commodity to manipulate its price, especially when those who need the commodity have no alternative.
- Squeeze – a situation where there is a lack of deliverable supplies, thus forcing the short position holder to cover their position at higher prices.

## Disorderly Trading, Liquidations and Uncommon Market Conditions



- Sudden Liquidations
  - Trading strategies
  - Financially induced liquidations
- Maintaining a Position Too Long
- Release of Market News
- Supply Disruptions

## Market Monitoring Tools



- Large Trader Reporting – obtain daily large trader data on futures and options positions from reporting firms.
- Position Limits – enforced by the CFTC and exchanges with violators subject to CFTC and exchange sanctions.
- Hedge Exemptions – for bona fide hedgers or commercial users.
  - All traders have an obligation to effect an orderly liquidation of its positions.

## Large Trader Reporting



- Daily reports for all “large traders.”
- Reportable levels vary across different futures contracts from as low as 25 contracts for small markets to as high as 3,000 contracts for large markets.
- Factors that determine the reportable levels.
  - Total open interest and the size of positions held by traders.
  - Surveillance history of the market.
  - Deliverable supplies (for physically settled markets).

## Large Trader Reporting (Cont.)



- Positions captured by reportable levels typically represent from 70% to over 90% of the total open interest.
- Reportable levels are periodically reviewed by the CFTC to balance the level of coverage with the reporting burden of reporting firms.



## Examples of Current Reporting Levels

Commodity	Number of Contracts
Coffee	50
Gold	200
Soybeans	150
Corn	250
Crude Oil (WTI)	350
S&P 500 Index	1,000
10-Year U.S. Treasury Note	2,000
Eurodollars	3,000

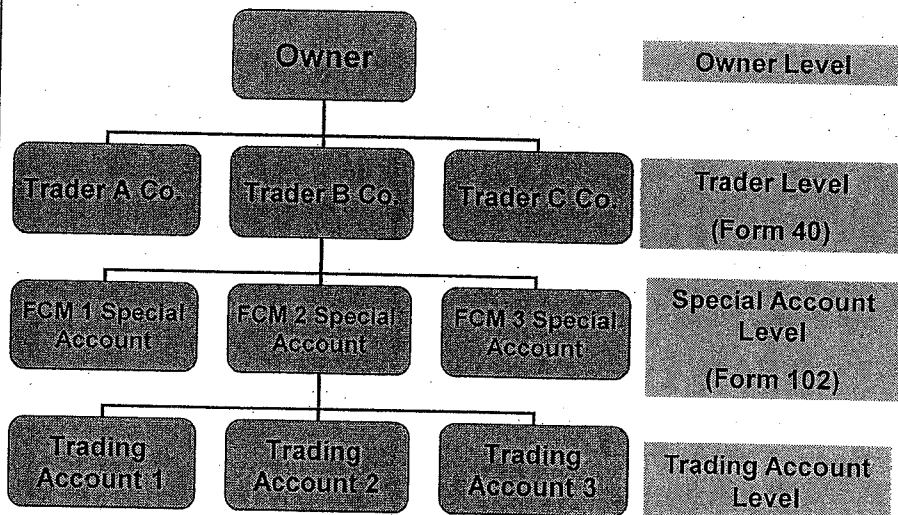
## Large Trader Data and Uses

- Examine all large positions that could pose a threat of market manipulation.
- Enforce speculative position limits.
- Monitor trader activity.
- Understand trading behavior.
- Identify owners of positions.
- Provide useful information about market composition.

## Reporting Firms

- Reporting firms are clearing members, futures commission merchants (FCM), and foreign brokers.
- Reporting firms file daily reports with the CFTC showing futures and option positions at or above reportable levels.

## Example of Account Aggregation



## Surveillance Monitoring Program



- Price movements.
- Changes in price relationships.
- Open interest and volume.
- Concentration of positions.
- Trading liquidity and successive price changes.
- Deliveries and deliverable supplies.

## Surveillance Questions

### Long Side



- Are the positions of the largest long trader(s) greater than deliverable supplies?
- Are the long traders intending to take delivery?
- Is taking delivery the least costly means of acquiring the commodity?

## Surveillance Questions

### Short Side

- Are the largest shorts capable of making delivery?
- Is making futures delivery a better alternative than selling the commodity in the cash market?

## Surveillance Questions

### Price Behavior

- Is the futures price reflecting the cash market value of the commodity near expiration?
- Is the spread between the expiring futures and the next delivery month reflective of underlying supply and demand conditions in the cash market?

## Surveillance of Cash-Settled Markets



- Focus on the integrity of the price series/index used to settle the contract.
  - Is it liquid?
  - Can it be dominated?
  - Is the calculation procedure robust?
- Monitor size of futures positions vis-à-vis its equivalent in the cash market.
  - Is the position highly leveraged vis-à-vis cash?

## Surveillance Questions for Cash-Settled Markets



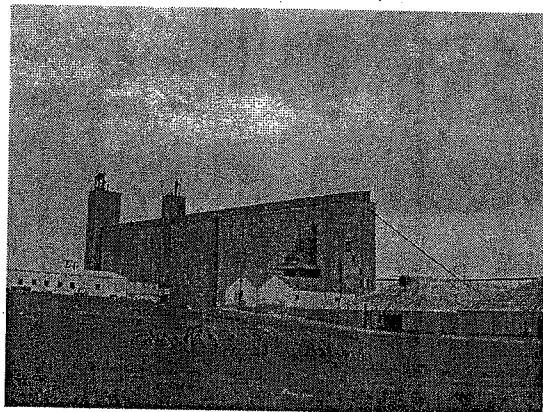
- Is the futures price consistent with supply and demand factors?
- How is the settlement cash price series behaving compared to similar cash prices?
- Are the largest futures traders engaged in cash trades that affect the settlement cash price?
- Do the futures traders have an incentive to engage in losing cash trades in order to benefit a large futures position?

## Dealing with Problems



- Jawboning – oral warnings (early stage)
- Warning Letter
- Emergency Action (for example, limiting trading, and forcing liquidation)
- Division of Enforcement

### The July 1989 Soybean Expiration Emergency Action Ferruzzi Finanziaria S.p.A.



## Ferruzzi Finanziaria



- Italian grain-trading firm and parent of Central Soya (U.S. subsidiary).
- Claimed to be hedging forward export sales and anticipated crushing requirements.
- Held a hedge exemption from the CFTC to exceed position limits.

## CBOT July 1989 Emergency Order



- July 12, 1989—Traders with a position in excess of three million bushels must reduce the position and any subsequent positions by at least 20% per trading day.
- July 18, 1989—Positions must be down to three million bushels.
- July 20, 1989—Positions must be down to one million bushels.

## Ferruzzi "Fun Facts" as of July 10, 1989



- **Futures Position—22 million bushels long.**
  - 7 times the speculative position limit.
  - 5 times that of the next largest trader.
  - 53% of the contract's total open interest.
- **Owned more than 85% of delivery eligible soybeans.**

## Summer '89 Market Conditions



- **Beginning Year Supplies.**
  - Sept 1, 1988—302 million bu.
  - Sept 1, 1987—436 million bu.
  - Sept 1, 1986—536 million bu.
- **Projected August 1998 Stocks—125 million bu.**
  - Lowest in 12 years.
  - 3-week domestic and export supply .



## Expectations of Market Participants



- Participants are expected to liquidate in an orderly manner.
- Hedgers holding long positions are expected to liquidate the futures positions as they acquire needed supplies to fulfill obligations.

## May 16, 1989 Ferruzzi Plants the Seeds for July



- Three days prior to the May expiration Ferruzzi held 16.2 million bushels long futures.
- CFTC warning letter.
  - "...prohibited by law from causing an artificial price..."
  - "Price manipulation is a violation of ... the Commodity Exchange Act."
  - "...consider whether or not to pursue an investigation that could result in charges of price manipulation."

May 18, 1989  
CFTC Takes Action and Ferruzzi Responds



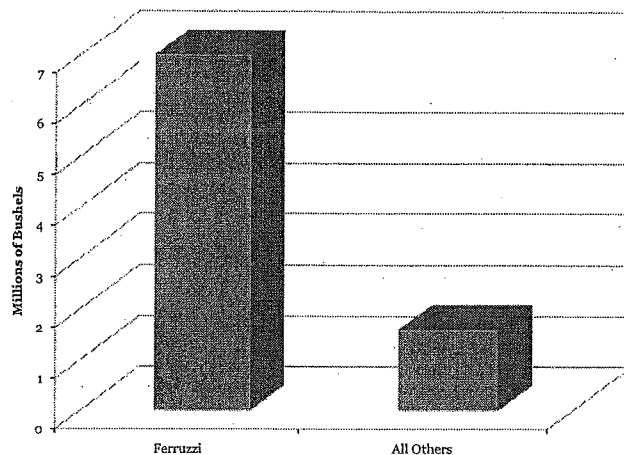
- Soybean position largely unchanged
- CFTC notified Ferruzzi that its hedge exemption was revoked.
- All May futures position in excess of 3 million had to be liquidated immediately.
- Ferruzzi rolled the May position to the July 1989 futures.

June-July 1989  
The Soybean Position Grows



- Early June 1989—Ferruzzi holds a 32 million bushel net long position.
- Ferruzzi's July futures position rises from 18% to 53% of the market.
- Position ostensibly held to hedge export sales and crushing requirements.
- Ferruzzi holds a dominant position—7 million bushels—in the deliverable supply of July beans.

**Bushels Held in Registered Warehouse Receipts  
at Chicago and Toledo--July 1, 1989**



### Ferruzzi's (Un)economic Behavior



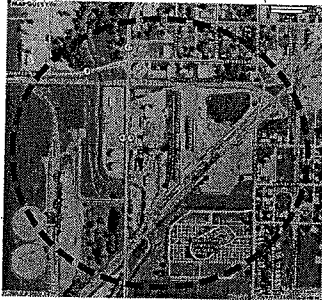
- Holding cash beans with a widening July-August spread.
- Failing to buy locally at a lower Delivery Equivalent Value.
- No shift in hedges from July to August.

## Holding Cash Beans

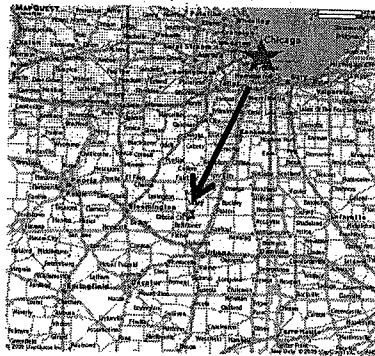


- July-August spread in May = 7¢ per bu.
- July-August spread in June = 30-40 ¢ per bu.
- The widening spread reflected a desire by users to pay a premium to acquire beans.
- Ferruzzi showed the desire to hold onto its beans.

## Failure to Bid at the Delivery Equivalent Value



Load-Out	6.0¢
Weighing and Grading	1.5¢
Grade Conversion (#2 to #1)	6.5¢
Transportation	<u>12.0¢</u>
Total Cost to Futures Delivery	26.0 ¢



Delivery Equivalent Bid at  
Gibson City = 26.0¢ Above July  
Futures

Central Soya Bid = 5¢ Below  
July Futures

## Failure to Bid at the Delivery Equivalent Value



### Central Soya Cash Bids vs Delivery Equivalent Value at Selected Points During Late June/Early July, 1989

Indianapolis, IN (vs Toledo)	Minus 5-15 ¢ per bushel
Bellevue, OH (vs Toledo)	Minus 5-15 ¢ per bushel
Gibson City, IL (vs Chicago)	Minus 20-35¢ per bushel

- Delivery Equivalent Value is the price at which the cost of buying soybeans locally would be equivalent to the total cost of taking delivery on futures contracts at the current futures price and shipping the soybeans from the delivery location to processing locations.

## Failure to Match Competitor Bids



### Central Soya versus Competitor Bids

Location	Cents Below Competitor
Decatur, IN	10.5¢
Bellevue, OH	2.5¢
Gibson, IL	15.5¢

- Central Soya was bidding far less than competitors for beans at locations near its processing facilities and could have acquired soybeans for less than what it would have cost to ship beans from futures delivery points.

## No Shift in Hedges



- July/August Spread moved from 7¢ to 40¢ per bushel.
- Economic wisdom would suggest that, where possible, hedges be shifted to the relatively cheaper, i.e. August futures—or buy low sell high!
- Ferruzzi's response? Stand Pat!

## Components for a Potential Price Distortion



- One firm held more than 50% of open interest.
- Position more than double the deliverable supply.
- Same firm owned 85% of deliverable supply.
- Firm was making no effort to obtain less expensive soybeans and liquidate futures.

## Final Warnings



- July 6—CFTC warns that Ferruzzi's hedge exemption was being reviewed and that the firm should increase cash bids, aggressively buy cash beans, and liquidate July futures.
- July 7—CBOT directs Ferruzzi to initiate an immediate and substantial reduction of positions. Failure to act would lead to a referral to the Board of Directors for an emergency action.

## Emergency Actions



- July 11—CFTC revokes Ferruzzi's hedge exemption and orders the firm to reduce its position of 22 million bushels to 3 million by July 18.
- July 11—CBOT adopts an emergency order that traders immediately begin to reduce positions in excess of 3 million bushels to 3 million bushels by July 18 and 1 million bushels by July 20.

## Surveillance Questions

### Long Side



- Are the positions of the largest long trader(s) greater than deliverable supplies?
  - ✓ Yes! Ferruzzi held a long futures position of 22 million bu., and held 85% of the deliverable supply.
- Are the long traders intending to take delivery?
  - ✓ Ferruzzi was making no efforts to reduce its futures position.
- Is taking delivery the least costly means of acquiring the commodity?
  - ✓ No. Ferruzzi was bidding far below the Delivery Equivalent Value and less than its competitors at its processing locations.

## Surveillance Questions Short Side



- Are the largest shorts capable of making delivery?
  - ✓ No. Shorts held only about 1.6 million bushels of deliverable soybeans to deliver against Ferruzzi's 22 million bushel futures position.
- Is making futures delivery a better alternative than selling the commodity in the cash market?



## Surveillance Questions

### Price Behavior

- Is the futures price reflecting the cash market value of the commodity near expiration?
  - ✓ No. Cash prices in the countryside as reflected by Central Soya and its competitors bids were well below futures prices.
  - ✓ Major soybean purchasers stopped quoting basis July and began quoting basis August or November.
- Is the spread between the expiring futures and the next delivery month reflective of underlying supply and demand conditions in the cash market?
  - No. The spread between the July and August expirations grew from 7¢ a bushel to 40¢.

## Final Observations

- What happened to the 7 million bushels held by Ferruzzi?
  - As of late fall 1989 the soybeans remained in storage—either still owned by Ferruzzi or sold to others. None were shipped or crushed.
- On September 15, 1989, Ferruzzi announced that its three principal grain and oilseed traders had resigned because of “differences over trading strategies.”
- In 1992 Ferruzzi settled—without admitting or denying charges—by paying the CBOT \$2 million in fines, \$1 million in court expenses and resigning its exchange seat.

# Price Manipulation

## Myths and Realities

## What is Price Manipulation?

- “Any and every operation, transaction or practice, calculated to produce a price distortion of any kind in any market, either in itself, or in relation to other markets.”
  - What is prohibited?
  - Focus is intent – ‘calculated’
- Price manipulation is therefore not an identified prohibited act, but a prohibited intent coupled with conduct which produces a prohibited result.

## What is Price Manipulation?

- Encompasses wide variety of actions
  - Supply Restrictions
  - Artificial Demand
  - Floating of False Rumors
  - Buying or Selling in Manner Designed to Have Affect on Price (“Banging the Close” “Bidding through the Offer”)
- Many of these actions cannot be prevented through ordinary regulation, e.g. contract design

## How to Prove Price Manipulation

- Focus on the price
  - Identify the specific price
  - Identify the specific commodity by contract
  - Identify the market – Who buys and sells the commodity?
- Focus on intent
  - Tapes, e-mails, instant messages – direct
  - Review previous and subsequent commercial activity – indirect

## How the CFTC Investigates Price Manipulation

- Referral
- Preliminary Inquiry
- Investigation
  - Documents
  - Sworn testimony
  - Assistance from other Divisions
    - Economic Analyses
    - Market Background
    - Market Observations

## Challenges in Price Manipulation Investigations

- There are a lot of suspects
- There are a lot of reasons why prices move
- Every market is unique
- Data is incomplete
- Records are incomplete
- The Rabbit Hole

## Challenges in Price Manipulation Prosecutions

- Rarely prosecuted
  - Limited understanding on part of Judiciary
  - Limited understanding on part of defense bar
- Highly technical
- Certain aspects are contrary to traditional understanding of illegal acts
  - Can't keep it a secret
  - There may not be a lie
- Document and witness intensive

## Myths of Price Manipulation #1

- Price Manipulation is a Common Industry Practice.

## Myths of Price Manipulation #2

- To Prove Price Manipulation, You Have to Prove Defendants Had Market Power

## Myths of Price Manipulation #3

- Price Manipulation is Just a Form of Anticompetitive Behavior.

## Myths of Price Manipulation #4

- Price Manipulation is a Good Way to Make Money.

## Hypothetical #1

- Trader wants to buy 100 futures contracts of wheat.
- Market is illiquid and a 100 lot order will drive price up.
- Trader places orders of 2 and 3 lots at prevailing prices until Trader has 100 contracts.
- When Trader stops buying, the price of wheat falls by 10%

## Hypothetical #2

- Exchange Futures contract requires delivery of cotton “within the official boundaries of Metropolis at a designated cotton warehouse.”
- Only two cotton warehouses exist in Metropolis, one night one of them burns down.
- Owner of the sole remaining warehouse immediately purchases a dominant position in cotton futures contracts, resulting in a price increase of 50%.