USES OF FUTURES MARKETS

• Why are futures markets useful?
  – To obtain information
    • Spot price forecasts
  – To trade
    • Speculation
    • Hedging (“insurance”)

FUTURES: INFORMATION

• Futures Markets:
  – Anybody can enter futures markets and attempt to make profits from superior information
    • Why would buyers buy?
      – They think that the price later on will be higher than it is currently
    • Why would sellers sell?
      – They think that the price later on will be lower than it is currently
  – Buying/selling activity drives prices so as to eliminate (expected) profitable opportunities
  – Futures prices reflect information from many buyers and sellers

FUTURES: INFORMATION

Predicting Futures Prices

<table>
<thead>
<tr>
<th>Futures Price</th>
<th>Time</th>
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<td>Today</td>
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• Futures Markets:
  – Anybody can enter futures markets and attempt to make profits from superior information (“speculation”)
  – Buying/selling activity drives prices so as to eliminate profitable opportunities
  – Futures prices reflect information from many buyers and sellers
• Hence:
  – Futures prices represent “market predictions” of prices in the future

FUTURES: INFORMATION
• Futures prices are “market predictions” of prices in the future
• Recall that basis is “easy” to predict
• Hence:
  Futures prices and basis forecasts can be used to predict local spot prices
FUTURES: INFORMATION

• Recall:
  BASIS = Local Spot Price – Futures Price

• Hence:
  Local Spot Price = Futures Price + BASIS
  Local Spot Price Forecast = Futures Price Forecast + “Basis” Forecast

FORECASTING LOCAL SPOT PRICES

• Example:
  – Today’s forecast of local spot corn price next November:
    
    Today’s Futures Price + Today’s Forecast of Basis Next November
    
    Today’s Forecast of Local Spot Price Next November

FORECASTING LOCAL SPOT PRICES

• Example: Today’s forecast of local spot corn price next November
  – Corn Contract Months:
    • March
    • May
    • July
    • September
    • December
FORECASTING LOCAL SPOT PRICES

• Example: Today’s forecast of local spot corn price next November

- Corn Contract Months:
  - March
  - May
  - July
  - September
  - December

- Suppose today's December Corn Futures Price is $2.35/bu
- Suppose today's forecast of basis next November is $0.30/bu UNDER December
FORECASTING LOCAL SPOT PRICES

• Example: Today’s forecast of local spot corn price next November
  – Today’s December Corn Futures Price is $2.35/bu
  – Today’s forecast of basis next November is $0.30/bu UNDER December

Today’s Forecast of Local Spot Price Next November

= $2.35/bu + (-$0.30/bu)
= $2.05/bu

FUTURES: SPECULATION

• Speculators:
  – Buy or sell in an attempt to profit from favorable price movements
  – Face the risk of losses from unfavorable price movements

FUTURES: SPECULATION

Position Diagram:
Net Profits for Long Speculative Position in Futures (Bullish Speculator)
FUTURES: SPECULATION

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Futures Price at Time of Offsetting

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FUTURES: SPECULATION

• Speculators:
  - Buy or sell in an attempt to profit from favorable price movements
  - Face the risk of losses from unfavorable price movements
  - Do not produce or consume the commodity
  - Benefit the market because they add liquidity
FUTURES: SPECULATION

- Futures markets greatly facilitate use of superior information for speculators:
  - Little capital required
    - Initial margin, margin calls
  - No need to handle commodity (e.g., transportation, storage, cleaning)
  - As easy to speculate DOWN as UP
FUTURES: SPECULATION

- Types of speculators:
  - Short term
    - Scalpers
    - Day traders
  - Long term

FUTURES: SPECULATION

- Types of speculators:
  - “Spreaders”
    - Spread
      - Price difference between two different markets or commodities
        » Spreads across commodities: Steers vs. corn, soybeans vs. soyoil and soymeal
        » Spreads across time: Corn December vs. July futures

FUTURES: SPECULATION

- “Spreaders” simultaneously buy and selling in two related markets in the expectation of making a profit when positions are offset
FUTURES: SPECULATION

Example of spreading:

- Suppose on April 15th:
  - KCBT HRW December wheat futures price is $4.07/bu
  - CBOT SRW December wheat futures price is $4.04/bu

  $\text{Spread KCBT-CBOT} = \$4.07/\text{bu} - \$4.04/\text{bu} = \$0.03/\text{bu}$

- Suppose a person is bullish about the KCBT-CBOT spread (e.g., he believes spread will rise to $0.10/bu)

Trading strategy for bullish speculator on the spread:
1. Go "long" (i.e., buy) the spread now at $0.03/bu
2. "Offset" (i.e., sell back) the spread sometime before December (hopefully, for more than $0.03/bu)

FUTURES: SPREADING EXAMPLE

Correct forecast scenario, prices rise

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| Gain (Loss) | $0.50/bu | (- $0.43/bu) |
| **NET GAIN** | **$0.07/bu** | (minus broker commissions) |

**FUTURES: SPREADING EXAMPLE**

- **Correct forecast scenario, prices fall**

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**Gain (Loss)**: ($0.50/bu) $0.57/bu

**NET GAIN**: $0.07/bu (minus broker commissions)