CBOT® Agricultural Futures
Side-by-Side Trading
CBOT Side-by-Side Ags

Agenda

• The Plan
• Ag Statistics
• Ag Contract Highlights
• Ag Delivery Process
• Ag Spreads
• News and References
• Ticker Symbols & Hours
• Assistance and Information
CBOT Side-by-Side Ags

The Plan

- Effective August 1, 2006
- Agricultural futures only
- Two platforms (open auction and e-cbot®)
- New ag futures hours
  - 6:30 p.m. to 6:00 a.m. (e-cbot only)
  - 9:30 a.m. to 1:15 p.m. (open auction and e-cbot)
    - South American Soybeans (9:00 a.m. to 1:15 p.m.)
CBOT Side-by-Side Ags
Ag Futures and Options Volume

ADV during Jun 06 = 593,798
Compared to Last Year: 16.2%
Compared to Last Month: 26.1%
Month End Open Interest on Jun 06 = 3,992,390
Compared to Last Year: 50.3%
CBOT Side-by-Side Ags
Ag Futures and Options Volume by Product

12-Mth Moving ADV (Thousands of Contracts)

- Soybean complex
- Corn
- Wheat
- Other

Through Jun-06
CBOT Side-by-Side Ags
Average Daily Volume Growth of Selected Commodities

- Corn Average Daily Volume
  - Jan – June 30, 2005: 116,642
  - Up 44%

- Wheat Average Daily Volume
  - Jan – June 30, 2006: 63,390
  - Jan – June 30, 2005: 41,717
  - Up 49%
# CBOT Side-by-Side Ags

## Recent Volume and Open Interest Milestones

<table>
<thead>
<tr>
<th></th>
<th>Record Volume</th>
<th>Record Open Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corn Futures</strong></td>
<td>336,422</td>
<td>1,351,188</td>
</tr>
<tr>
<td></td>
<td>May 12, 2006</td>
<td>June 1, 2006</td>
</tr>
<tr>
<td><strong>Corn Options</strong></td>
<td></td>
<td>1,037,573</td>
</tr>
<tr>
<td></td>
<td></td>
<td>June 16, 2006</td>
</tr>
<tr>
<td><strong>Wheat Futures</strong></td>
<td>157,446</td>
<td>546,844</td>
</tr>
<tr>
<td></td>
<td>May 31, 2006</td>
<td>May 31, 2006</td>
</tr>
<tr>
<td><strong>Wheat Options</strong></td>
<td></td>
<td>250,103</td>
</tr>
<tr>
<td></td>
<td></td>
<td>June 6, 2006</td>
</tr>
<tr>
<td><strong>Soybean Futures</strong></td>
<td>200,787</td>
<td>390,927</td>
</tr>
<tr>
<td></td>
<td>June 30, 2006</td>
<td>June 2, 2006</td>
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</table>
## CBOT Side-by-Side Ags
### Agricultural Futures ADV – June 2006

<table>
<thead>
<tr>
<th></th>
<th>June 2006 ADV</th>
<th>Total Open Interest – June 30, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Futures</td>
<td>213,335</td>
<td>1,335,969</td>
</tr>
<tr>
<td>Soybean Futures</td>
<td>111,055</td>
<td>330,941</td>
</tr>
<tr>
<td>Wheat Futures</td>
<td>73,505</td>
<td>455,089</td>
</tr>
<tr>
<td>Soybean Oil Futures</td>
<td>46,566</td>
<td>240,817</td>
</tr>
<tr>
<td>Soybean Meal Futures</td>
<td>44,368</td>
<td>184,110</td>
</tr>
<tr>
<td>Oat Futures</td>
<td>1,946</td>
<td>13,672</td>
</tr>
<tr>
<td>Rough Rice Futures</td>
<td>1,503</td>
<td>13,223</td>
</tr>
</tbody>
</table>
### CBOT Side-by-Side Ags

**Agricultural Volatilities – June 2006**

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Volatility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Futures</td>
<td>28%</td>
</tr>
<tr>
<td>Wheat Futures</td>
<td>27%</td>
</tr>
<tr>
<td>Soybean Futures</td>
<td>24%</td>
</tr>
<tr>
<td>Soybean Oil Futures</td>
<td>21%</td>
</tr>
<tr>
<td>Soybean Meal Futures</td>
<td>28%</td>
</tr>
<tr>
<td>Oat Futures</td>
<td>26%</td>
</tr>
<tr>
<td>Rough Rice Futures</td>
<td>26%</td>
</tr>
</tbody>
</table>

Historical Volatility is expressed as a percentage and is calculated by taking the standard deviation of the log-differences of the daily settlement prices of the underlying commodity over the course of the month. The result is multiplied by the square root of 252 (the number of trading days in a year).
Historical Wheat Volatilities, 2000-2006

% Annualized Volatility

Wheat

DJIA
Historical Soybean Volatilities, 2000-2006

% Annualized Volatility

Soybeans

DJIA

Jan-00 Apr-00 Jul-00 Oct-00 Jan-01 Apr-01 Jul-01 Oct-01 Jan-02 Apr-02 Jul-02 Oct-02 Jan-03 Apr-03 Jul-03 Oct-03 Jan-04 Apr-04 Jul-04 Oct-04 Jan-05 Apr-05 Jul-05 Oct-05 Jan-06 Apr-06
CBOT Side-by-Side Ags
Contract Highlights

- **Corn, Wheat, Soybeans, S.A. Soybeans, Oats**
  - 5,000 bushels (bu)
  - Tick: ¼ cent ($0.0025 = $12.50/per contract)

- **Soybean Meal**
  - 100 short tons
  - Tick: 10 cent tick ($0.10 = $10/contract)

- **Soybean Oil**
  - 60,000 pounds
  - Tick: 1/100 cent ($0.0001 = $6/contract)

- **Rice**
  - 2,000 hundredweight (cwt)
  - Tick: ½ cent ($0.005 = $10/contract)

- **Ethanol**
  - 29,000 gallons (gal)
  - Tick: 1/10 of a cent ($0.001 = $29/contract)
**CBOT Side-by-Side Grains**

**Contract Highlights**

- **Contract Months**
  - Corn, Wheat, Oats: Mar, May, Jul, Sep, Dec
  - Soybeans, S.A. Soybeans: Jan, Mar, May, Jul, Aug, Sep, Nov
  - Soybean Meal: Jan, Mar, May, Jul, Aug, Sep, Oct, Dec
  - Soybean Oil: Jan, Mar, May, Jul, Aug, Sep, Oct, Dec
  - Rice: Jan, Mar, May, Jul, Sep, Nov
  - Ethanol: All calendar months

- **Contract Liquidity**
  - Like other complexes, the nearby Ag futures usually have a significant amount of volume and open interest
  - Unlike other complexes, the deferred Ag futures also have a significant amount of volume and open interest
  - Spreads are a major component of CBOT Ag markets
CBOT Side-by-Side Ags
Delivery Process

- All CBOT grain and soybean products
  - Physical delivery

- Delivery: 3-day process
  - Position day:
    - Short (seller) gives notice to the clearing provider of its intent to deliver
  - Notice day
    - Oldest long (buyer) on record is matched to the seller making delivery
    - Both the long and short are notified
    - The long receives an invoice from the short
  - Delivery day
    - Long makes payment to short
    - Short transfers delivery instrument to long
CBOT Side-by-Side Ags

Delivery Process

- **First position day**
  - Second to last business day of the month preceding the delivery month.
    - Example: June 29, 2006, is first position day for July 06 delivery;
  - To avoid possibility of delivery, the Long MUST offset their position prior to first position day
  - **Important**: Daily price limits are removed effective first position day

- **Last trading day**
  - All ag futures except for Rice:
    - Business day prior to 15th calendar day
  - Rice:
    - Seventh business day prior to the last business day of the delivery month

- **Last delivery day**
  - Corn, Soybeans, S.A. Soybeans, SoyMeal, Wheat, Ethanol:
    - 2nd business day after last trading day of delivery month
  - Rice, SoyOil
    - Last business day of the delivery month; Note Soyoil last delivery day will change to seventh business day following last trading day effective with the January 2007 contract
  - Oats:
    - Seventh business day following last trading day of delivery month
CBOT Side-by-Side Ags
Spreads and Seasonality

- Old crop / New crop
  - Distinguishes one growing season (past or current) from the next (current or future)
  - Carry over reserves (ending stocks) from one crop year to the next crop year, also known as beginning stocks, are added to current year's production to determine supply. Primary old crop/new crop spreads:
    - Corn: Jul vs. Dec
    - Soybeans: Jul vs. Nov
    - Wheat: Dec vs. Jul
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Spreads & Carry

- **Cost of carry**
  - Storage costs, insurance & interest to hold physical commodity from one delivery month to the next.
  - Reflected in the price difference between contract months.
  - Full carry is a price differential that reflects the total cost.

- **Normal ag markets reflect “carry”**
  - Ample supply
  - Market wants grain to remain in storage.
  - Ag markets are usually “carry” markets
  - Ag markets are usually less than “full carry.”

- **Inverted markets reflects**
  - Supply shortage
  - Market needs grain to come out of storage
CBOT Side-by-Side Ags
Cost of Carry Calculation

- **Formula**
  
  \[ \text{# days} \times \{ (\text{Interest rate/365} \times \text{Futures Price}) + .0015 \} \]

- **Example:**
  
  \[ 30 \times \{ (0.055/365 \times 6.00) + 0.0015 \} = 0.072/\text{bu/month} \]

  LIBOR = 5.5%
  CBOT Carrying Charges for Corn, Wheat and Soybeans = 0.0015
  August Soybean Futures = 6.00/bushel
CBOT Side-by-Side Ags
Common Spreads

- Intra-market spreads
  - (a.k.a. calendar or inter-delivery)
  - Reflect the cost of carry between contract months of the same commodity.
- Examples
  - Corn: Mar/May; May/July; July/Dec
  - Soybeans: Jan/Mar; Mar/July; July/Nov
  - Wheat: Mar/May; May/Jul; Dec/July
CBOT Side-by-Side Ags
Common Spreads

- Inter-market spreads
  - Reflect the relationship between the same commodities from different exchanges
    - CBOT vs. KCBOT
    - CBOT vs. MGEX
  - Note: Soft red winter wheat, which is the primary delivery class for the CBOT Wheat futures, has the lowest world production numbers but the CBOT futures volume is greater than all of the Wheat futures markets in the world combined.
    - CBOT liquidity is the reason
CBOT Side-by-Side Ags
Common Spreads

- Inter-commodity spreads
  - Reflect the relationship between different but related commodities
  - Relationships usually reflect “substitutability”
  - Examples
    - Corn vs. Wheat
    - Corn vs. Soybeans
    - Corn vs. Hogs
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Common Spreads

- Commodity-Product spreads
  - Reflect the relationship between a raw product and the processed products or by-products
  - Relationships usually reflect “substitutability”

- Examples
  - Soybean Crush
    - Buy Soybeans, Sell SoyMeal, Sell SoyOil
    - 1 to 1 ratio or 10 Beans, 11 Meal, 9 oil ratio
    - Fundamentals can change dramatically depending on whether Beans are being crushed for meal or oil demand
  - Reverse Soybean Crush
    - Sell Soybeans, Buy SoyMeal, Buy SoyOil
CBOT Side-by-Side Ags

News and References

- Numbers and news that drive prices
  - USDA, CFTC and CBOT reports
  - Key reports can be accessed through:
    - www.cbot.com > Market Data > Reports > Ag Fundamental Reports

- Examples from the above url:
  - Periodic Reports
  - Fundamental Reference
  - Supply Charts
  - Demand Charts
CBOT Side-by-Side Ags
News and References

- **Agricultural Homepage:**
  - [www.cbot.com](http://www.cbot.com) > Products > Agricultural

- **Tutorials, Webinars and Publications:**
  - [www.cbot.com](http://www.cbot.com) > Education > Tutorials, Webinars, Publications

- **Position limits:**
  - [www.cbot.com](http://www.cbot.com) > About CBOT > Rules & Regulations > 4C

- **Margins:**
  - [www.cbot.com](http://www.cbot.com) > Clearing > Margins
CBOT Side-by-Side Ags

News and References

- **Ticker Symbols, Trading Hours & Clearing Codes:**
  - [www.cbot.com](http://www.cbot.com) > Education > Trading Hours and Symbols

- **Exchange Transactions Fees:**
  - [www.cbot.com](http://www.cbot.com) > Clearing > Exchange Transaction and Clearing Fees

- **Commodity News For Tomorrow**
  - Daily commodity publication
  - Provided by the CBOT in partnership with Dow Jones Newswires
  - [www.cbot.com](http://www.cbot.com) > Market Data > Commodity News for Tomorrow
**CBOT Side-by-Side Ags**

**Trading Hours**

- **All CBOT Ag Full-size Futures** (except for S.A. Soybeans)
  - **Electronic:** 6:30 p.m. – 6:00 a.m. (starts night before trade date)
    9:30 a.m. – 1:15 p.m.
  - **Open Auction:** 9:30 a.m. – 1:15 p.m.

- **South American Beans (only):**
  - **Electronic:** 6:30 p.m. – 6:00 a.m. (starts night before trade date)
    9:00 a.m. – 1:15 p.m
  - **Open Auction:** 9:00 a.m. – 1:15 p.m.

**Note:**

- All CBOT Ag Futures close at NOON on last trading day
- Modified close only available in Open Auction – usually 1:23 p.m. to 1:25 p.m.
- All times listed above are Chicago time
# CBOT Side-by-Side Ags

## Futures Ticker Symbols and Hours

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Open Auction Ticker Symbol</th>
<th>Open Auction Hours</th>
<th>Electronic Ticker Symbol</th>
<th>Electronic Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Futures</td>
<td>(C)</td>
<td>9:30 am – 1:15 pm</td>
<td>(ZC)</td>
<td>6:30 pm – 6:00 am and 9:30 am – 1:15 pm</td>
</tr>
<tr>
<td>Wheat Futures</td>
<td>(W)</td>
<td>9:30 am – 1:15 pm</td>
<td>(ZW)</td>
<td>6:32 pm – 6:00 am and 9:30 am – 1:15 pm</td>
</tr>
<tr>
<td>Soybean Futures</td>
<td>(S)</td>
<td>9:30 am – 1:15 pm</td>
<td>(ZS)</td>
<td>6:31 pm – 6:00 am and 9:30 am – 1:15 pm</td>
</tr>
<tr>
<td>Soybean Meal</td>
<td>(SM)</td>
<td>9:30 am – 1:15 pm</td>
<td>(ZM)</td>
<td>6:31 pm – 6:00 am and 9:30 am – 1:15 pm</td>
</tr>
<tr>
<td>Soybean Oil Futures</td>
<td>(BO)</td>
<td>9:30 am – 1:15 pm</td>
<td>(ZL)</td>
<td>6:31 pm – 6:00 am and 9:30 am – 1:15 pm</td>
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<tr>
<td>S. American Soybean Futures</td>
<td>(BS)</td>
<td>9:00 am – 1:15 pm</td>
<td>(ZK)</td>
<td>6:31 pm – 6:00 am and 9:00 am – 1:15 pm</td>
</tr>
<tr>
<td>Oat Futures</td>
<td>(O)</td>
<td>9:30 am – 1:15 pm</td>
<td>(ZO)</td>
<td>6:33 pm – 6:00 am and 9:30 am – 1:15 pm</td>
</tr>
<tr>
<td>Rough Rice Futures</td>
<td>(RR)</td>
<td>9:30 am – 1:15 pm</td>
<td>(ZR)</td>
<td>6:33 pm – 6:00 am and 9:30 am – 1:15 pm</td>
</tr>
<tr>
<td>Ethanol Futures</td>
<td>(AC)</td>
<td>9:30 am – 1:15 pm</td>
<td>(ZE)</td>
<td>6:36 pm – 6:00 am and 9:30 am – 1:15 pm</td>
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<tr>
<td>CBOT mini-sized Corn Futures</td>
<td>(YC)</td>
<td>9:30 am – 1:45 pm</td>
<td>n/a</td>
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<tr>
<td>CBOT mini-sized Wheat Futures</td>
<td>(YW)</td>
<td>9:30 am – 1:45 pm</td>
<td>n/a</td>
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<tr>
<td>CBOT mini-sized Soybean Futures</td>
<td>(YK)</td>
<td>9:30 am – 1:45 pm</td>
<td>n/a</td>
<td></td>
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## CBOT Side-by-Side Ags
### Option Trading Symbols and Hours

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Open Auction Ticker Symbol &amp; Hours</th>
<th>ELECTRONIC Ticker Symbol &amp; Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Calls</td>
<td>(CY) 9:30 am – 1:15 pm</td>
<td>(OZCC) 6:32 pm – 6:00 am</td>
</tr>
<tr>
<td>Corn Puts</td>
<td>(PY) 9:30 am – 1:15 pm</td>
<td>(OZCP) 6:32 pm – 6:00 am</td>
</tr>
<tr>
<td>Wheat Calls</td>
<td>(WY) 9:30 am – 1:15 pm</td>
<td>(OZWC) 6:34 pm – 6:00 am</td>
</tr>
<tr>
<td>Wheat Puts</td>
<td>(WZ) 9:30 am – 1:15 pm</td>
<td>(OZWP) 6:34 pm – 6:00 am</td>
</tr>
<tr>
<td>Soybean Calls</td>
<td>(CZ) 9:30 am – 1:15 pm</td>
<td>(OZSC) 6:33 pm – 6:00 am</td>
</tr>
<tr>
<td>Soybean Puts</td>
<td>(PZ) 9:30 am – 1:15 pm</td>
<td>(OZSP) 6:33 pm – 6:00 am</td>
</tr>
<tr>
<td>Soybean Meal Calls</td>
<td>(MY) 9:30 am – 1:15 pm</td>
<td>(OZMC) 6:33 pm – 6:00 am</td>
</tr>
<tr>
<td>Soybean Meal Puts</td>
<td>(MZ) 9:30 am – 1:15 pm</td>
<td>(OZMP) 6:33 pm – 6:00 am</td>
</tr>
<tr>
<td>Soybean Oil Calls</td>
<td>(OY) 9:30 am – 1:15 pm</td>
<td>(OZLC) 6:33 pm – 6:00 am</td>
</tr>
<tr>
<td>Soybean Oil Puts</td>
<td>(OZ) 9:30 am – 1:15 pm</td>
<td>(OZLP) 6:33 pm – 6:00 am</td>
</tr>
<tr>
<td>Soybean Crush Calls</td>
<td>(BC) 9:30 am – 1:15 pm</td>
<td>n/a</td>
</tr>
<tr>
<td>Soybean Crush Puts</td>
<td>(BP) 9:30 am – 1:15 pm</td>
<td>n/a</td>
</tr>
<tr>
<td>Oat Calls</td>
<td>(OO) 9:30 am – 1:15 pm</td>
<td>(OZOC) 6:35 pm – 6:00 am</td>
</tr>
<tr>
<td>Oat Puts</td>
<td>(OV) 9:30 am – 1:15 pm</td>
<td>(OZOP) 6:35 pm – 6:00 am</td>
</tr>
<tr>
<td>Rough Rice Calls</td>
<td>(RRC) 9:30 am – 1:15 pm</td>
<td>(OZRC) 6:35 pm – 6:00 am</td>
</tr>
<tr>
<td>Rough Rice Puts</td>
<td>(RRP) 9:30 am – 1:15 pm</td>
<td>(OZRP) 6:35 pm – 6:00 am</td>
</tr>
</tbody>
</table>
CBOT Side-by-Side Ags
For Assistance

- Electronic Trading Issues:
  - Market Operations: 312-347-4600

- Connectivity Issues:
  - Functional Member Readiness: 312-341-7955

- Product Issues:
  - Business Development: 312-341-7955
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