Options

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Options Contracts

An option is the right, but not the obligation, to buy or sell a futures contract.

Farmers can buy and sell options.
- When you buy an option, you get the right.
- When you sell an option, you face the obligation.

Options are tied to specific futures contracts.

The strike price is the price in the option at which you may buy (or sell) futures contracts.
Types of Options

There are two types of options:

- Puts
- Calls

A put option gives you the right to sell futures. Put options are often used to set price floors.

A call option gives you the right to buy futures. Call options are often used to replace cash bushels.

Examples

Let’s say you buy a $4.00 put on March corn futures.

That put gives you the right to sell March corn futures for $4.00 per bushel.

If you had bought a $4.00 call, that would give you the right to buy March corn futures for $4.00 per bushel.
Put Example

Put options pay out when futures prices fall. Here’s the payout schedule for a $4.00 put on Mar. 2016 corn.

Call Example

Call options pay out when futures prices rise. Here’s the payout schedule for a $4.00 call on Mar. 2016 corn.
Premium vs. Margin

Options Premiums
Can be divided into two sections:

- Intrinsic value - What is the option worth today?
- Time value - How much time is left on the option?

Intrinsic value depends on the futures price and the strike price of the option.

Time value depends on the length of time in the option and the price volatility in the market.
Options Example

March soybean put option @ $10.00 per bushel

<table>
<thead>
<tr>
<th>Day</th>
<th>Futures Price</th>
<th>Option Premium</th>
<th>Intrinsic Value</th>
<th>Time Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$10.00</td>
<td>$0.60</td>
<td>$0.00</td>
<td>$0.60</td>
</tr>
<tr>
<td>2</td>
<td>$10.20</td>
<td>$0.56</td>
<td>$0.00</td>
<td>$0.56</td>
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<tr>
<td>3</td>
<td>$9.70</td>
<td>$0.83</td>
<td>$0.30</td>
<td>$0.53</td>
</tr>
<tr>
<td>4</td>
<td>$9.55</td>
<td>$0.95</td>
<td>$0.45</td>
<td>$0.50</td>
</tr>
<tr>
<td>5</td>
<td>$9.90</td>
<td>$0.67</td>
<td>$0.10</td>
<td>$0.57</td>
</tr>
</tbody>
</table>

Options Features

Advantages
- Options can establish price floors or ceilings
- Not locked in to a particular buyer
- Flexible
- No margin requirements

Disadvantages
- Specific size of contract
- Commissions and option premiums