Delaware Cooperative Extension

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What's New in Marketing and Management

Selecting and Using Agricultural Options

Introduction

In the fall of 1984, agricultural options were reintroduced to agricultural producers as a price risk management tool. Since that time, put and call options have been available to producers to use as a means of establishing minimum sales prices (puts) and maximum buying prices (calls) for commodities. The use of options in a producers marketing program are noted for providing a limited risk marketing alternative for pricing agricultural commodities. This fact sheet gives a brief overview of what is involved in establishing sales prices for commodities using agricultural commodity options.

What are Options?

An option is the right, but not the obligation, to buy or sell a futures contract at a specified price within a specified time period. This is very different from the futures contract that incurs an obligation to deliver or to receive the physical commodity if the contract is not offset before the last day of trading. For the right granted, in the option contract, the buyer pays a premium to the seller. The option seller must fulfill the contract terms if the buyer elects to go ahead and exercise the right purchased with the option. The buyer will not have margin calls as long as the option is not exercised. The typical use of an option by a producer for pricing commodities does not involve exercising the option.

Steps to Consider in Using Options

There are three basic steps to consider in using options. The first is the selection of the appropriate option contract month. To do this, select the option which will expire closest to, but not before, the time the physical commodity will be sold or purchased. For example, if soybeans will be harvested and sold in November, the January option would be appropriate. Chances are, trading would have ceased by the time the beans were harvested if the November option were chosen. For corn harvested and sold in October, the December option would be appropriate.

The second step involves selecting the appropriate type of option. To ensure products to be sold at a later time (a growing crop) against price declines, buy a put. To ensure products to be bought at a later time (corn purchased for feeding)against price increases, buy a call.

The third step involves determining what the option strike price is offering in terms of a minimum cash selling price (MSP) for puts or the maximum buying price (MBP) for calls. The calculations can be made in the following manner:

An Illustration Example 1. Calculating the Minimum Selling Price for a $2.80 December Corn Put

1. Select the appropriate contract month	December
2. Select the appropriate type of option	Put
3. Select the strike price	$2.80
4. Calculate the Minimum Selling Price*	
(-) a. subtract the premium	- .21
(-) b. subtract the "opportunity cost," assume 12% interest for 6 months**	- .01
(-) c. subtract the commission fee, assume $50 for a 5,000 bu. contract	- .01
(+/-) d. adjust for basis	+/- .10
5. Minimum Selling Price	= $2.67+

*Procedure varies somewhat when calculating the Maximum Buying Price (MBP) for a call.

Pro and Con on Options

Buying Put Options (Pro)

- Permits establishing a minimum selling price while retaining the opportunity to benefit from higher cash prices.
- Option buyer does not receive margin calls.
- Maximum loss is limited to the premium amount.

Buying Put Options (Con)

- Option premiums can be relatively expensive at times, thereby limiting use.

Pro and Con on Futures

Selling Futures (Pro)

- Establishes a selling price within the range of basis error,
- Commissions are much less than option premiums.

Selling Futures (Con)

- Eliminates the opportunity to participate in higher cash market prices.
- Requires a margin deposit, and margin calls may occur if prices move higher.

Summary

In our example, the likely minimum local cash price at harvest is $2.67+ per bushel. The plus references the fact that this is the minimum price expected from a cash sale projected by buying the put option. In the event of higher prices at harvest, the net price received will be higher.

You can buy more or less price insurance by buying options with different strike prices and premiums. To determine the minimum selling price suggested by different strike prices, repeat the steps in Example l.

Definition of Terms

Options traders use specific terminology when referring to options. Some of the more important terms are:

Premium: An amount agreed upon between the buyer and seller for the purchase or sale of a commodity option. Buyers pay the premium to the writers of the option.

Strike (Exercise) Price: The price at which a person may buy or sell a put or call option for a known premium.

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