AgriLIFE EXTENSION
Texas A&M System

Hedging with a Put Option

The Basics of a Put

- Put options provide producers a flexible forward pricing tool that protects against a price decline.

- For the cost of a premium, a put option requires no margin deposits.

- Buyers of put options can benefit from higher prices.

- Put options are like an insurance policy. The buyer has no further obligation after the premium is paid.

- Options are for a specific underlying futures contract delivery month. It has an expiration date and a selected strike price.

The Basics of a Put (cont.)

- The option buyer may allow the option to expire, make an offsetting transaction, or exercise it at the strike price selected.

- Commodity Clearing Corporation guarantees performance of each contract.

- Each option has a buyer and seller.

- Option premiums determined by market forces. The main forces are:
    - ✓ Time before expiration
    - ✓ Volatility of underlying futures price
    - ✓ The strike price to market price relationship

CASE EXAMPLE: Price decline

A producer expects to harvest 1,000 bales of cotton in October.

In May: December futures price is 76.00 cents per pound. The harvest-time basis is usually 6 cents. The total cost of producing cotton is estimated at 65.00 cents. Thus, the producer decides to establish a floor price for all 1,000 bales by buying a 76.00 put for 3 cents premium. If the market price increases, the producer can still benefit from a higher cash price and let the options expire.

		cents/pound
May:	December Futures	76.00
	Expected Basis	-6.00
	Put Premium	-3.00
	Estimated Net Price	67.00
October:	December Futures	66.00
	Actual Basis	-6.00
	Cash Price	60.00
	Gross Value of the Put (76.00 – 66.00)	+10.00
	Realized Price	70.00
	Put Premium Price	-3.00
	Net Price[1]	67.00

[1] Less brokerage fee

Since the market declined and the basis was 6 cents, the net price received is the same as the price floor estimated in May.

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CASE EXAMPLE: Price Increase

A producer expects to harvest 1,000 bales of cotton in October.

In May: December futures price is 76.00 cents per pound. The harvest-time basis is usually 6 cents. The total cost of producing cotton is estimated at 65.00 cents. Thus, the producer decides to establish a floor price for all 1,000 bales by buying a 76.00 put for 3 cents premium. If the market price increases, the producer can still benefit from a higher cash price and let the options expire.

		cents/pound
May:	December Futures	76.00
	Expected Basis	-6.00
	Put Premium	-3.00
	Estimated Net Price	67.00
October:	December Futures	86.00
	Actual Basis	-6.00
	Cash Price	80.00
	Gross Value of the Put	+0.00
	Realized Price	80.00
	Put Premium Price	-3.00
	Net Price[1]	77.00

[1] Less brokerage fee

A big advantage of a put is that it provides a "price floor" but allows the benefit of a higher price. The expected 1,000 bales can be hedged and there are no margins required in buying puts.

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Advantages and Disadvantages of Put Options

- **Advantages:**
  - ✓ Reduces risk of price decrease
  - ✓ No margin deposit
  - ✓ Assist in obtaining credit
  - ✓ Established price helps
  - ✓ Production decisions
  - ✓ Buyers are available
  - ✓ Procedures for settling contract disputes

- **Disadvantages:**
  - ✓ Premium payment required
  - ✓ Net price subject to basis variability
  - ✓ Involves brokerage fee
  - ✓ Fixed contract quantity