Options for livestock producers

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Overview

- Using put options to set a minimum price for feeder cattle sold this fall.
- Using call options to set a maximum purchase price for feed.

Review → Two Types of Options:

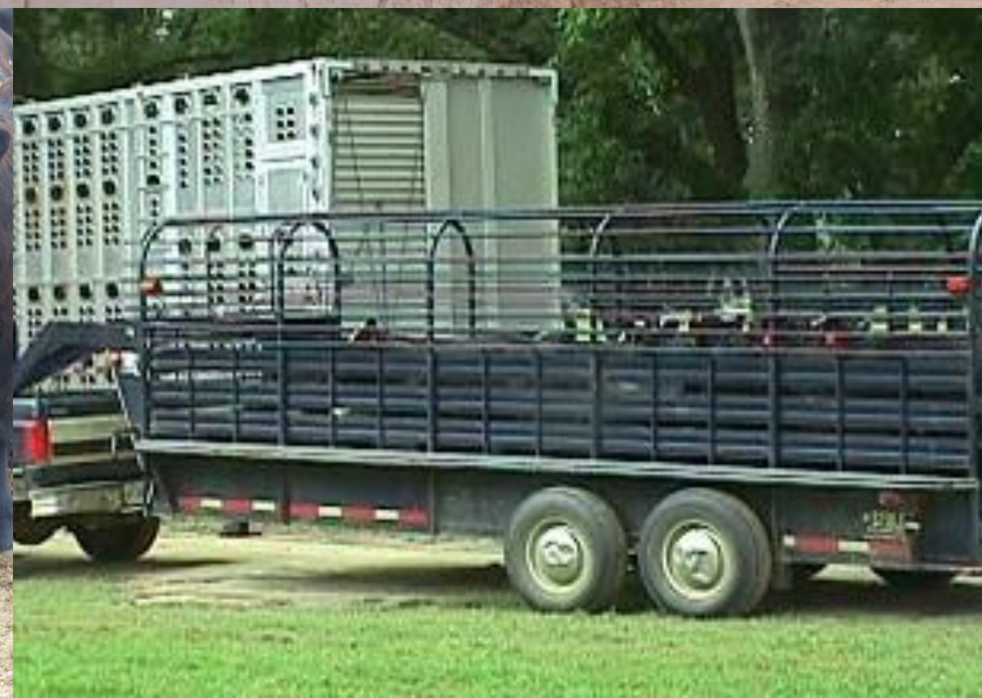
- Put Option - gives the holder the right but not the obligation to ***SELL*** a futures contract at a set price before the option expires. (Insurance against falling prices). →If you will be selling the commodity use a Put

- Think of a put option as a price FLOOR

Review →Two Types of Options:

- Call Option – gives the holder the right but not the obligation to BUY a futures contract at a set price before the option expires. (Insurance against rising prices!) →If you will be buying the commodity use a CALL
- Think of a call option as a price CEILING

Put Options



What is the "Minimum" Sales Price?

$$
\begin{array}{l}
\quad \text{Strike Price} \\
+ \ \text{Basis} \\
\underline{- \ \text{Option Premium} \qquad\qquad\qquad} \\
\text{"Minimum" Sales Price}
\end{array}
$$

Options and Premiums

Type: American Options | Expiration: AUG 2011 | Strike Range: All | View: Calls / Puts ✓ | Update

Premium Cost

Strike Price

Strike Price	Type	Last	Change	Prior Settle	High	Low	Volume	Hi / Lo Limit	Updated
96000	PUT	0.325 a	-0.225	0.550	-	-	0	No Limit 0.0125	9:06:16 AM CST 2/15/2011
98000	PUT	0.375 a	-0.225	0.600	-	-	0	No Limit 0.0125	9:06:16 AM CST 2/15/2011
100000	PUT	0.425 a	-0.250	0.675	-	0.425 a	0	No Limit 0.0125	9:06:16 AM CST 2/15/2011
102000	PUT	0.500 a	-0.225	0.725	-	0.500 a	0	No Limit 0.0125	9:06:16 AM CST 2/15/2011
104000	PUT	0.575 a	-0.250	0.825	-	0.575 a	0	No Limit 0.0125	10:33:35 AM CST 2/15/2011
106000	PUT	0.600 a	-0.300	0.900	-	0.600 a	0	No Limit 0.0125	9:12:48 AM CST 2/15/2011
108000	PUT	0.800 a	-0.200	1.000	-	0.800 a	0	No Limit 0.0125	9:06:16 AM CST 2/15/2011
110000	PUT	0.925 a	-0.175	1.100	-	0.925 a	0	No Limit 0.0125	9:06:16 AM CST 2/15/2011
112000	PUT	1.075 a	-0.200	1.275	-	1.075 a	0	No Limit 0.0125	9:06:16 AM CST 2/15/2011
114000	PUT	1.250 a	-0.200	1.450	-	1.250 a	0	No Limit 0.0125	9:06:16 AM CST 2/15/2011
116000	PUT	1.450 a	-0.225	1.675	-	1.450 a	0	No Limit 0.0125	9:06:16 AM CST 2/15/2011
118000	PUT	1.750	-0.175	1.925	-	1.700 a	4	No Limit 0.0125	10:07:56 AM CST 2/15/2011
120000	PUT	2.000 a	-0.225	2.225	-	2.000 a	0	No Limit 0.0125	9:06:16 AM CST 2/15/2011
122000	PUT	2.350 a	-0.225	2.575	2.400	2.400	7	No Limit 0.0125	10:33:35 AM CST 2/15/2011
124000	PUT	2.775 a	-0.225	3.000	-	2.775 a	0	No Limit	9:06:16 AM CST

So how does a Put option work?

Ima Seller has a group of steers he is considering selling in late July or August. Based on his figures, his breakeven sales price for a 550 pound calf is $115. Assuming a +3.00 basis, if a Aug FC put sells for $120 @ $2.00 premium, how would this work?

So how does a Put option work?

Ima Seller has a group of steers he is considering selling in late July or August. Based on his figures, his breakeven sales price for a 550 pound calf is $115. Assuming a +3.00 basis, if a Aug FC put sells for $120 @ $2.00 premium, how would this work?

Minimum Sales Price

Strike =	120.00
Basis =	3.00
Premium =	2.00

Minimum Sales Price = 120, 121, 123, 125, or none of the above?

Put Option Example – Market Rises

Cash Market		Futures Market		
February 16, 2011				
		Buy 1 Aug Feeder Cattle Option		
Expected basis	$3.00	Strike =	$	120.00
		Premium =	$	2.00

Put Option Example – Market Rises

Cash Market			Futures Market		
February 16, 2011					
			Buy 1 Aug Feeder Cattle Option		
Expected basis		$3.00	Strike =	$	120.00
			Premium =	$	2.00
August 10, 2011					
Cash market =		$133.00	Futures Market =	$	130.00
Option gain or loss	$	(2.00)	Option Gain/Loss	$	(2.00)
Net sales Price	$	131.00			

Put Option Example – Market Declines

Cash Market		Futures Market		
February 16, 2011				
		Buy 1 Aug Feeder Cattle Option		
Expected basis	$3.00	Strike =	$	120.00
		Premium =	$	2.00

Put Option Example – Market Declines

Cash Market			Futures Market		
February 16, 2011					
			Buy 1 Aug Feeder Cattle Option		
Expected basis		$3.00	Strike =	$	120.00
			Premium =	$	2.00
August 10, 2011					
Cash market =		$113.00	Futures Market =	$	110.00
Option gain or loss	$	8.00	Option Gain/Loss	$	8.00
Net sales Price	$	121.00			

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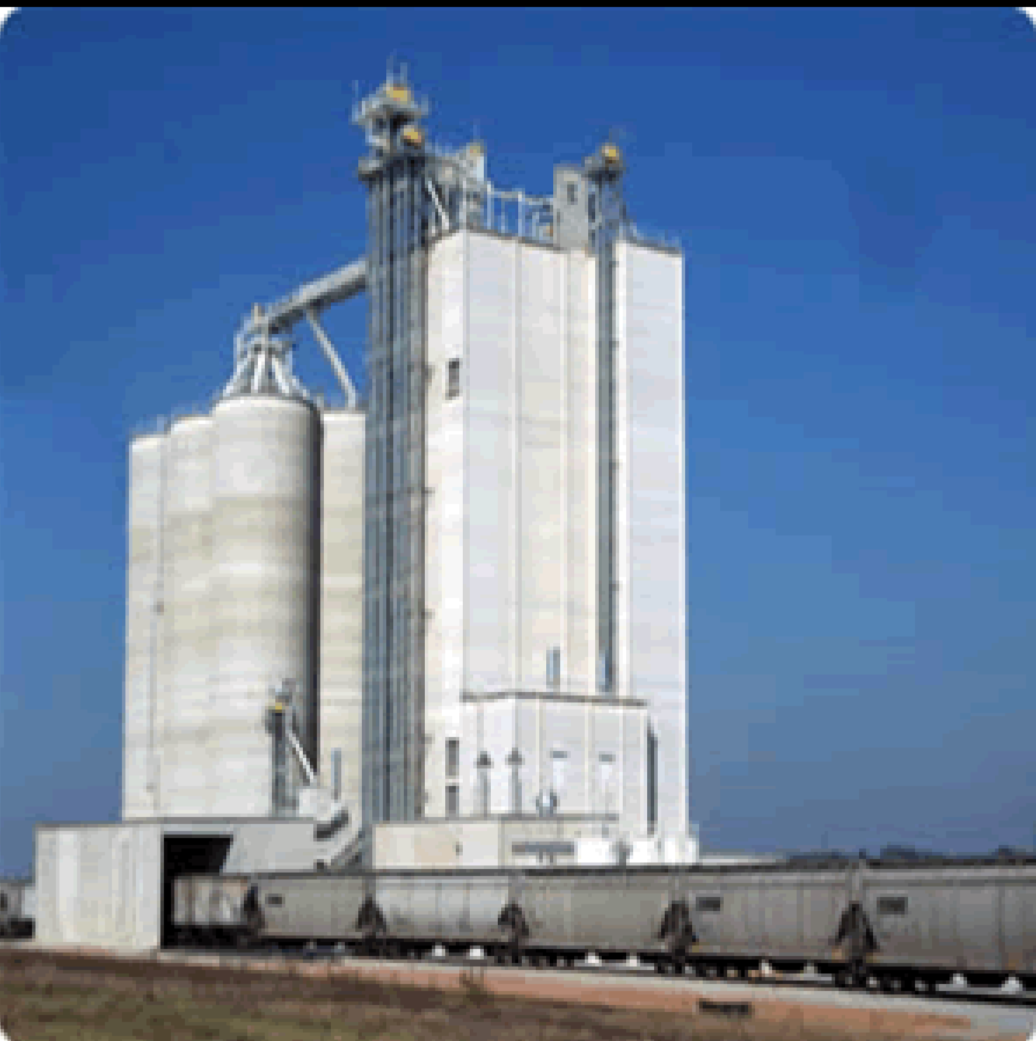
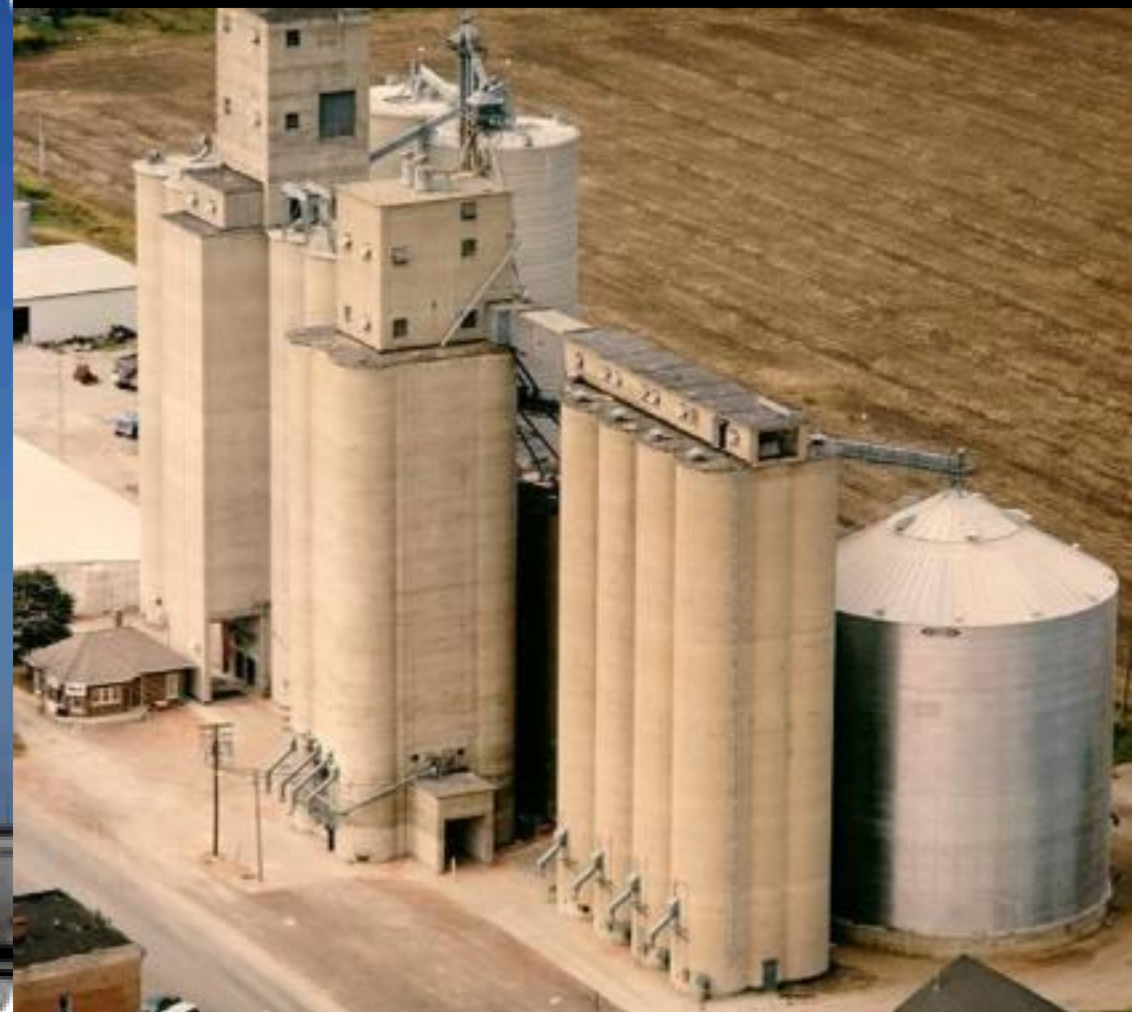
Call Options





What is the "Maximum" Purchase Price?

$$
\begin{array}{l}
\quad \text{Strike Price} \\
+ \text{Basis} \\
+ \text{Option Premium} \\
\hline
\text{"Maximum" Purchase Price}
\end{array}
$$

What is the "Maximum" Purchase Price?

Strike price =	$7.00
+ Basis =	$0.45
+ Premium =	$0.36
Max Purchase Price	$7.71

So how does a CALL option work?

Ima Buyer anticipates that he will need to purchase 5,000 bushels of corn in Mar. He expects a basis of (+$0.50) at this time. If Dec Corn futures are at $6.00 in Feb, how would a $6.00 call with a premium of $0.69 work?

So how does a CALL option work?

Ima Buyer anticipates that he will need to purchase 5,000 bushels of corn in Mar. He expects a basis of (+$0.50) at this time. If Dec Corn futures are at $6.00 in Feb, how would a $6.00 call with a premium of $0.69 work?

Maximum Purchase Price

Strike =	6.00
Basis =	0.50
Premium =	0.69

Max Purchase Price = 5.31, 6.50, 7.19, or none of the above?

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Options and Premiums

Southeast Cattle Advisor - Windows Internet Explorer

http://www.secattleadvisor.com/

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Close for this futures contract month

Puts

Quotes | Time & Sales | Volume | Settlements

Trade Date: 2/15/2011

Globex Options | Open Outcry Options

Market Data is delayed at least 10 minutes

Futures Underlier

Month	Charts	Last	Change	Prior Settle	High	Low	Volume	Hi / Lo Limit	Updated
Dec 2011		592'6	-14'6	607'4	612'6	586'2	39,864	637'4 577'4	1:30:00 PM CST 2/15/2011

Option Quotes View Spread Quotes

Turn Auto-refresh OFF | About this Report

Type: American Options

Expiration: DEC 2011

Strike Range: At The Money

View: Calls ☑ Puts ☐

Update

Strike Price	Type	Last	Change	Prior Settle	High	Low	Volume	Hi / Lo Limit	Updated
590	CALL	72'2 b	-6'1	78'3	75'7	70'4	29	108'3 48'3	1:30:00 PM CST 2/15/2011
600	CALL	69'0	-5'2	74'2	72'0	65'0	60	104'2 44'2	1:30:00 PM CST 2/15/2011
610	CALL	64'2 b	-6'1	70'3	-	62'7 a	2	100'3 40'3	1:30:00 PM CST 2/15/2011
620	CALL	60'6	-6'0	66'6	62'4	60'0	98	96'6 36'6	1:30:00 PM CST 2/15/2011
630	CALL	56'7 b	-6'1	63'0	61'2	56'1 a	0	93'0 33'0	1:30:00 PM CST 2/15/2011

Market data explanation/disclaimer

Get customized historical data with DataMine

CME Group is the world's leading and most diverse derivatives marketplace. The company is comprised of four Designated Contract Markets (DCMs). Further information on each exchange's rules and product listings can be found by clicking on the links to CME, CBOT, NYMEX and COMEX.

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Call Option Example – Market Declines

Cash Market		Futures Market		
February 16, 2011				
		Buy 1 Dec Corn Option		
Expected basis	$0.50	Strike =	$	6.00
		Premium =	$	0.69

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Call Option Example – Market Declines

Cash Market			Futures Market		
February 16, 2011					
			Buy 1 Dec Corn Option		
Expected basis		$0.50	Strike =	$	6.00
			Premium =	$	0.69
October 10, 2011					
Cash market =		$4.50	Futures Market =	$	4.00
Option gain or loss	$	(0.69)	Option Gain/Loss	$	(0.69)
Net Purchase Price	$	5.19			

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Call Option Example – Market Increases

Cash Market		Futures Market		
February 16, 2011				
		Buy 1 Dec Corn Option		
Expected basis	$0.50	Strike =	$	6.00
		Premium =	$	0.69

Call Option Example – Market Increases

Cash Market			Futures Market		
February 16, 2011					
			Buy 1 Dec Corn Option		
Expected basis		$0.50	Strike =	$	6.00
			Premium =	$	0.69
October 10, 2011					
Cash market =		$7.50	Futures Market =	$	7.00
Option gain or loss	$	0.31	Option Gain/Loss	$	0.31
Net Purchase Price	$	7.19			

Summary

- Options are price insurance against a price catastrophe
- In hindsight, options will always be 2nd best.
- Remember, this is RISK MANAGEMENT → Can you make decisions after the fact?

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