Commodity Options Market

A market in which producers purchase the "opportunity" but not the "obligation" to sell or buy a commodity at a certain price anytime during a pre-specified period of time.

INSURANCE

INSURANCE

Substitution of a small but certain loss (insurance premium) for the possibility of a large uncertain loss.

Two Options Markets

- Insuring a selling price
  – PUT OPTION
- Insuring a buying price
  – CALL OPTION

– In both cases the underlying commodity is a futures contract, not the physical commodity

PUT OPTION

A put option gives the holder the right, but not the obligation, to sell a specific futures contract at a specific price

"To put it on them"

Call Option

A call option gives the holder the right, but not the obligation, to buy a specific futures contract at a specific price

"To call from them"

OPTIONS TERMS

•Strike Price – price at which the futures contract can be bought or sold.

•Premium – cost of the option. The buyer loses the premium regardless of whether the option is used.

Factors Affecting Option Premiums

- Difference between the strike price of the option and the price of the underlying commodity (futures contract)
  - INTRINSIC VALUE
- Length of time to option expiration
  - TIME VALUE

INTRINSIC VALUE

"positive" difference between the strike price and the underlying commodity price

- FOR A PUT OPTION – strike price exceeds futures price
- FOR A CALL OPTION – strike price below futures price

Options are said to be:

In the money – have intrinsic value

Out of the money – have no intrinsic value

TIME VALUE

- Portion of option premium resulting from length of time to expiration. Expiration is the date on which the rights of the option holder expire.
- Usually decreases with length of time until expiration, but does increase as price volatility of the underlying futures contract increases.

INTRINSIC VALUE
\+ TIME VALUE
_____
OPTION PREMIUM

OPTIONS WORKSHEET

STRIKE PRICE _____
\- EXPECTED BASIS _____
\- PREMIUM _____
\- COMMISSION _____

= EXPECTED MIN NET SELLING PRICE _____

What Happens If?

- July Futures are $2.35
- Basis in June is expected to be –0.39
- July puts are:
  - $2.40 strike 17cents
  - $2.30 strike 11cents
  - $2.20 strike 7 cents

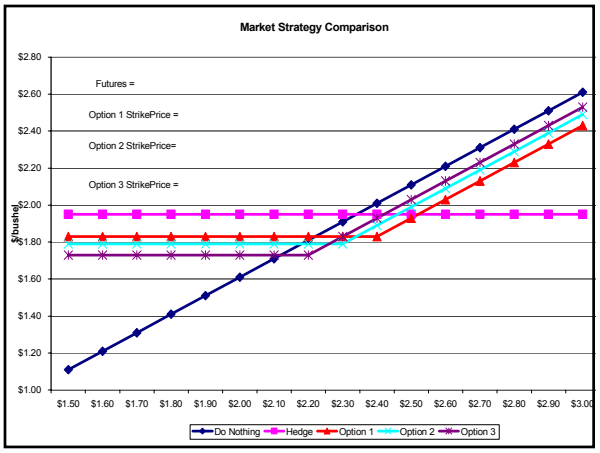
	Hedge	Option 1	Option 2	Option 3
Price	$2.35	$2.40	$2.30	$2.20
Basis	-0.39	-0.39	-0.39	-0.39
Premium		-0.17	-0.11	-0.07
Comm.	-.01	0-.01	0-.01	-0.01
Exp Min Price	$1.95	$1.83	$1.79	$1.73

Prices fall 50 cents
Futures = $1.85

	Hedge	Option 1	Option 2	Option 3
Sell Futures	$2.35	$2.40	$2.30	$2.20
Buy Futures	-$1.85	-$1.85	-$1.85	-$1.85
Premium & Comm	-$0.01	-$0.18	-$0.12	-$0.08
Net Futures	+$0.49	+$0.37	+$0.33	+0.27
Sell Cash	$1.46	$1.46	$1.46	$1.46
Net Price	$1.95	$1.83	$1.79	$1.73

Prices rise 50 cents
futures = $2.85

	Hedge	Option 1	Option 2	Option 3
Sell Futures	$2.35			
Buy Futures	-$2.85			
Premium & Comm	-$0.01	-$0.18	-$0.12	-$0.08
Net Futures	-$0.51	-$0.18	-$0.12	-$0.08
Sell Cash	$2.46	$2.46	$2.46	$2.46
Net Price	$1.95	$2.28	$2.34	$2.38



OPTIONS WORKSHEET

STRIKE PRICE _____
- EXPECTED BASIS _____
+ PREMIUM _____
+ COMMISSION _____

= EXPECTED MAX NET PURCHASE PRICE _____

What Happens If?

- July Futures are $2.35
- Basis in June is expected to be –0.19
- July calls are:
  - $2.50 strike 7cents
  - $2.40 strike 11cents
  - $2.30 strike 16 cents

	Hedge	Option 1	Option 2	Option 3
Price	$2.35	$2.40	$2.30	$2.20
Basis	-0.19	-0.19	-0.19	-0.19
Premium		+0.07	+0.12	+0.20
Comm.	+.01	+.01	+.01	+0.01
Exp Max Price	$2.17	$2.29	$2.24	$2.22

Prices rise 50 cents Futures = $2.85

	Hedge	Option 1	Option 2	Option 3
Buy Futures	$2.35	$2.40	$2.30	$2.20
Sell Futures	$2.85	$2.85	$2.85	$2.85
Premium & Comm	$0.01	$0.08	$0.13	$0.21
Net Futures	+$0.49	+$0.37	+$0.42	+0.44
Buy Cash	$2.66	$2.66	$2.66	$2.66
Net Price	$2.17	$2.29	$2.24	$2.22

Prices falls 50 cents futures = $1.85

	Hedge	Option 1	Option 2	Option 3
Buy Futures	$2.35			
SellFutures	$2.85			
Premium & Comm	$0.01	-$0.08	-$0.13	-$0.21
Net Futures	-$0.51	-$0.08	-$0.13	-$0.21
Buy Cash	$2.66	$2.66	$2.66	$2.66
Net Price	$2.17	$2.74	$2.79	$2.83

Fortenbery Rules of Thumb

- Never pay for intrinsic value in a price risk management program.
- Convince yourself that the futures market has a good chance to increase by TWICE the premium before buying an option.
- Only use options as a temporary substitute for a hedge or forward cash contract.