

COMMODITY PRODUCTS

Establishing a Selling Price Range with Grain and Oilseed Futures and Options

Managing your risk of falling prices can enhance your farm's bottom line and that's what business is all about.

Market risk is always going to be there. You don't have to like it but you do need to manage it. Regardless of where your farming operation is located, market risks include two common components: price and basis. Prices for feed grains and oilseeds – such as corn, wheat and soybeans – are discovered at the CME Group futures markets. Basis is the relationship between a local cash market (e.g., grain elevator or cooperative) price and the related CME Group futures price. Simply stated: Cash Price – Futures Price = Basis at a specific point in time.

There are a variety of strategies to manage the price risk associated with falling prices by using futures, options, cash market contracts, government programs or combinations of these. The most basic futures strategy to protect your selling price is the short futures hedge. This strategy provides protection against falling prices. The most basic option strategy to protect your selling price is the long put option hedge. This strategy is similar to the futures strategy in that it protects your farming operation against falling grain and oilseed prices, but unlike the futures strategy, it gives you the opportunity to take advantage of rising prices. In other words, the long put option strategy establishes a minimum (floor) selling price while allowing you to retain the upside potential.

You might be asking why every producer wouldn't choose options over futures. There are several reasons. Most importantly, the

protection and the opportunity of the long put option strategy is available at a cost to you – the premium. Therefore, there are times when the short futures strategy will out perform the long put option strategy. This usually occurs when there is market risk and prices are falling. In this case, the futures strategy will out perform the option strategy by the amount of premium you had to pay.

When evaluating price risk management strategies, some producers may shy away from options because they feel the put option premiums are too costly. If that is the case, you should be aware of another strategy that provides downside price protection and some upside opportunity similar to the long put option position, but at a lower cost.

Long Put Option/Short Call Option Hedge

The benefit of combining a short call position with the long put position is that the cost of protection against falling prices is reduced by the amount of premium you collect for selling the call option, thereby raising the minimum (floor) selling price. The downside to this strategy is that the short call option position establishes a maximum (ceiling) selling price when the market is rising. In effect, this strategy will establish a selling price range for your grains and oilseeds.

The selling price range is determined by the difference in the strike prices of the call and the put. Since there are many different strike prices to choose from, you will be able to choose the size of the price range.

Advantages

- Provides risk management against falling grain and oilseed prices at a lower cost
- Establishes a selling price range for your grain and oilseeds
- Helps with planning and budgeting
- Stronger than expected basis improves the effective selling price
- Contract's financial integrity guaranteed by CME Clearing

Disadvantages

- Benefit of rising market prices is limited to the ceiling price of the range
- Short call position requires maintaining a margin account
- The full put option premium must be paid when the position is initiated
- Weaker than expected basis lowers the effective selling price
- Short call position may be exercised on at any time during the life of the option
- Transaction costs on put and call

Evaluation of the Long Put/Short Call Hedge

Expected Selling Price Range Minimum (Floor) =
 Put strike price - put premium paid + call premium received
 +/- expected basis*

Expected Selling Price Range Maximum (Ceiling) =
 Call strike price - put premium paid + call premium received
 +/- expected basis*

*Always include transaction costs in your calculations

Long Put/Short Call Hedge Example

Assumptions:

November Soybean futures currently trading at \$12.40
 Buy (long) November 1220 Soybean put option for \$1.16 (premium)
 Sell (short) November 1300 Soybean call option at \$.95 (premium)
 Expected basis is expected to be \$.30 under November Soybean futures

Expected Price Range:

Floor Price: $\$12.20 - 1.16 + .95 - .30 = \11.69
 Ceiling Price = $\$13.00 - 1.16 + .95 - .30 = \12.49

Harvest Scenario 1: Falling Prices

November Soybean futures	\$ 8.00
Basis	- .30
Local Soybean Price (futures - basis)	7.70
November 1220 Soybean put option (premium)	4.20
November 1300 Soybean call option (premium)	.00
Put option profit ¹	+3.04
Call option profit ²	+ .95
Effective Sell Price	\$11.69

¹Buy put at \$1.16 and sell (offset) put at \$4.20

²Sell call at \$.95 and call expires worthless

Harvest Scenario 2: Rising Prices

November Soybean futures	\$14.00
Basis	- .30
Local Soybean price (futures - basis)	\$13.70
Nov. 1220 Soybean put option (premium)	.00
Nov. 1300 Soybean call option (premium)	1.00
Put option loss ³	-1.16
Call option loss ⁴	-.05
Effective Sell Price	\$12.49

³Buy put at \$1.16 and put expires worthless

⁴Sell call at \$.95 and buy call (offset) at \$1.00

Long Put/Short Call Hedge Notes

As prices moved lower in Harvest Scenario 1, the lower cash Soybean price was offset by a gain on the long put and the short call. Without the hedge, the effective Soybean selling price would have been \$3.99 lower at \$7.70/bushel.

Regardless of how low the November Soybean market declines, the \$11.69 floor selling price would be achieved.

In Harvest Scenario 2, there were losses on the put and the call, but the effective selling price still improved because of the significant increase in the local Soybean prices. The effective selling price improved as the market increased but the improvement was limited to the \$12.49 ceiling.

Summary

The long put/short call hedge is only one of many risk management strategies available for producers by using CME Group Grain and Oilseed futures and options. The flexibility, financial integrity and transparency of the CME Group markets allow the farming community to adjust their market risk exposure to any level with which they are comfortable.

For more information, contact your broker directly or e-mail commodities@cmegroup.com.

To learn more about CME Group Commodity products, please visit www.cmegroup.com.

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