

Key

Econ 337 Agricultural Marketing, Spring 2020
In Class Activity 4, February 13, 2020

- 1) Continuing from the scenario set up in 1) of Homework #1. A summer stocker operator decided to protect cattle to be sold in October. October futures are trading at \$142.225 per cwt and basis is expected to be \$7.960 per cwt for the quality of steers they will be selling. However, instead of a straight hedge, the backgrounder decided to purchase a put option with a \$135 strike price for \$4.900 per cwt. Assume brokerage commission is \$30 (\$0.075/cwt) to buy an option contract and \$30 (\$0.075/cwt) to sell offset a futures position.

a) What price floor does the backgrounder think they have set?

Option strike price

– Put premium

Futures equivalent

+ Expected Oct basis

– Maximum possible commission

Price floor

$$135.000 - 4.9000 = 130.100 + 7.960 - 0.150 = \$137.910 \text{ per cwt}$$

Parts b and c are stand-alone questions using this same initial position from question 1.

- b) In October, the backgrounder sells the steers for \$155.765 per cwt. The futures price has risen to \$147.805 per cwt. Does the backgrounder want to exercise his/her option?

No. Actual price is greater than the price floor. Prices went up after the Put Option purchase and the Put Option buyer retained the right to benefit from future price increases.

Key

-What will be the net price for the calves?

Cash market price
+ Net on option trade
- Brokerage commission
Net price

$$155.765 - 4.9000 - 0.075 = \$150.790 \text{ per cwt}$$

c) In October, the backgrounder sells the steers for \$137.960 per cwt. The futures price has fallen to \$130.000 per cwt. Does the backgrounder want to exercise his/her option?

Yes. Actual price equals the price floor. Prices went down after the Put Option purchase and the Put Option buyer retained the right to sell futures.

-What will be the net price for the calves?

Cash market price
+ Net on option trade
Sold OCT FC futures @ \$135.000
Offset (buy) OCT FC futures @ \$130.000
- Brokerage Commission
Net price

$$137.960 - 4.900 + 5.000 - 0.150 = \$137.910$$