

# THE SHORT HEDGE

## How Does a Short Hedge Work?

Livestock producers who are feeding cattle or hogs for market can use a short hedge to offset their risks of prices falling by the time they're ready to sell. First, they sell futures contracts to cover the livestock they plan to market. When the livestock are ready for market, they buy back the futures contracts and sell in the cash market simultaneously. The short hedge allows them to lock in a price for the cattle or hogs to the extent that the basis turns out as expected.

Now	Later
Sell futures contract	Buy futures contract back + Sell livestock in the cash market

## Example: Selling Live Cattle Futures

Suppose a livestock producer plans to have 40 head of steers ready for the cash market in October. It's now April, and the producer is uncertain about the outlook for cattle prices. The October futures price is \$80/cwt., and the producer expects the basis to be \$2 under. The producer sells an October Live Cattle futures contract at \$80/cwt.

	Cash Market	Futures	Basis
April	Expected 78	Sell Oct 80	Expected -2

## What Happens if Cattle Prices Fall?

By October, suppose the futures price has fallen to \$75/cwt., and the cash price is \$73/cwt. The basis turned out to be -\$2 as expected. The hedger buys back the futures contract and realizes a gain of \$5/cwt. (\$80 - \$75). Then, the hedger sells the cattle in the cash market at \$73/cwt. The net price received is the cash price of \$73 plus the \$5 futures gain, or \$78/cwt.

	Cash Market	Futures	Basis
April	Expected 78	Sell Oct 80	Expected -2
October	Sell 73	Buy back 75	Actual -2
	Cash Market	Futures Gain	Net Price Received
	\$73	\$5	\$78

The lower price in the cash market is offset by the gain realized in the futures market.

## Short Hedge Calculations

### Determining the Futures Gain or Loss

Futures Selling Price - Futures Buying Price =  
Futures Gain/Loss

### Determining the Net Price Received

Cash Price + Futures Gain/Loss = Net Price  
Received

### What Happens if Cattle Prices Rise?

Suppose the cash price in October turns out to be \$82/cwt., and the October Live Cattle futures price turns out to be \$84/cwt. Again, the basis is \$2 under as expected. The livestock producer buys back the futures contract at \$84/cwt. and experiences a loss of \$4 (\$80 – \$84). Then the producer sells the cattle in the cash market at \$82/cwt. This time the net price received is the cash price of \$82 plus –\$4, the loss in the futures market, or \$78/cwt.

	Cash Market	Futures	Basis
April	Expected 78	Sell Oct 80	Expected –2
October	Sell 82	Buy back 84	Actual –2
	Cash Market	Futures Gain	Net Price Received
	\$82	\$4	\$78

The loss experienced in the futures market is offset by the higher price in the cash market. The net price received is the same as the previous example.

### What if the Basis is Stronger?

Notice that the difference between the price at which the futures were sold and the net price received equaled the actual basis. The actual basis used in the previous examples was \$2 under. In each case, the net price received was the futures selling price of \$80 plus –\$2, or \$78.

But, suppose in October the futures price is \$75/cwt. and the cash price is \$74/cwt., so the basis turns out to be \$1 under. The net price received is the cash price of \$74 plus the futures gain of \$5, or \$79/cwt. Comparing this example to the two others, the stronger basis resulted in an improvement in net price received.

#### Key Points

1. A short hedge protects a livestock seller against falling prices.
2. Selling livestock futures helps to lock in a sale price for livestock to the extent that basis turns out as expected.
3. A short hedge is completed by simultaneously buying back the futures contracts and selling the livestock in the cash market.
4. If prices fall, the lower cash price is offset by a gain in the futures market.
5. If prices rise, the loss in the futures market is offset by a higher cash market price.
6. Realized basis determines how advantageous the hedge results are.