

What is Basis?

USDA Sale Report, Fort Pierre Livestock, Fort Pierre, SD 10-18-19

CME Feeder Cattle Futures 10-18-19

Month	Options	Chart	Last	Change	Prev. Settle	Open	High	Low	Volume	1Y Low	Updated
OCT 2019	CALL		143.50	-	143.50	143.50	143.50	143.50	0	140.00	08/09/19 CT
NOV 2019	CALL		142.50	-	142.50	142.50	142.50	142.50	0	137.50	08/09/19 CT
JAN 2020	CALL		139.40	-	139.40	139.40	139.40	139.40	0	136.50	21/01/2019
MAR 2020	CALL		138.40	-	138.40	138.40	138.40	138.40	0	135.50	08/09/19 CT
MAY 2020	CALL		138.00	-	138.00	138.00	138.00	138.00	0	134.50	21/01/2019
APR 2020	CALL		143.25	-	143.25	143.25	143.25	143.25	0	140.25	08/09/19 CT
MAY 2020	CALL		141.15	-	141.15	141.15	141.15	141.15	0	140.00	08/09/19 CT
AUG 2020	CALL		145.50	-	145.50	145.50	145.50	145.50	0	140.00	21/01/2019
SEP 2020	CALL		144.70	-	144.70	144.70	144.70	144.70	0	140.00	08/09/19 CT
OCT 2021	CALL		0.00	-	0.00	0.00	0.00	0.00	0	140.25	21/01/2019
OCT 2021	CALL		0.00	-	0.00	0.00	0.00	0.00	0	No Limit / No	08/09/19 CT
										Limit	21/01/2019

Legend: CALL Options Price Chart About This Report

https://www.ams.usda.gov/mnreports/ltd_mars_2021.pdf

<https://www.cmegroup.com/trading/agricultural/livestock/feeder-cattle.html>

Beefbasis.com Basis estimate for a 425lb steer in Fort Pierre, SD on 10-18-19

Model-Estimated Feeder Cattle Basis Values

Model-Estimated feeder cattle basis, \$/cwt	48.56
Confidence interval for basis, \$/cwt	41.89 to 55.23
Expected cash price, \$/cwt	192.06
Confidence interval for expected cash price, \$/cwt	185.39 to 198.73
Optimal hedge ratio	1.53
Number of calves hedged per contract	76.77

Analysis

A real world example: Yearling Enterprise 'Hedge'

Purchase 450lb calf Nov.1, 2019 Fort Pierre, SD:	\$750
Cost to run steer from Nov.1 to Sept. 15, 2020:	\$475
Total Cost:	\$1225

Sept. 2020 Feeder Cattle Futures as of Oct. 20, 2019	\$145
Estimated Basis for 915lb steer on September 15 th :	\$-2
Selling Price:	\$143
Total Dollars Received:	\$1308
Net Profit: (\$1308-1225) This is a 6.77% ROI	\$83

If we are looking for \$100/hd Profit, we would need cash price of \$145, or Sell Sept. 2020 Feeder Cattle futures at \$147 as a hedge. This is an 8.16% ROI. Going this route does not leave open any upside potential.

A real world example: Yearling Enterprise

'Put Option to Lock in a Breakeven'

Purchase 450lb calf Nov.1, 2019 Fort Pierre, SD:	\$750
Cost to run steer from Nov.1 to Sept. 15, 2020:	\$475
Total Cost:	\$1225

Breakeven on steer: \$1225/915lbs:	\$134
\$-2 basis:	\$136
Cost of \$136 Sept. 2020 Put Option, 4.250 (As of Oct 20)	\$2125
\$2125/55hd of steers(50,000lb contract/915lbs):	\$39/hd

Using a Put Option locks in a floor price, leaving the topside open.

Ways to cheapen up this form of risk management are selling a call or selling a put at a different strike price, but you are subject to market risk if the futures head in that direction.

A real world example: Cow/Calf Enterprise

Breakeven Cost for our Cowherd (May/June calving, all leased land, purchased feed, Cows 50% paid off) \$860

	Projected	April 2019	Projected	Current
Steer Calf Sales:	\$475	\$475	\$408	\$408
Heifer Calf Sales:	\$342	\$342	\$280	\$280
Bull Calf Sales:	\$30	\$30	\$30	\$30
Cull Cow Sales:	\$120	\$120	\$159	\$159
Total Sales:	\$967	\$967	\$877	\$877
Profit:	\$107/hd	\$107/hd	\$17/hd	\$17/hd
Put Option Value:			\$59/hd	\$59/hd
			\$76/hd total Profit	\$76/hd total Profit

In April 2019, with the Fall 2019 Feeder Cattle Futures at \$160+ we calculated a \$156 put at \$2100 to lock in just over \$100 profit/hd on our cowherd. Fast Forward to October 2019, Oct & Nov Feeder Cattle futures at approximately \$143. Our put option is now worth \$5900 or \$59/hd. Basis has changed from our projection, but with our Put Option we have gained \$59/hd that we otherwise wouldn't have gotten. This is no homerun, but we will be in business next year.

Making the Decision... Which one is best?

-It Depends!

In the Cow/Calf Example, the \$156 Put did not give us the profit we projected, however, in the grand scheme of things, making \$76/hd vs. \$17/hd gives us wiggle room for unexpected events such as death loss, higher % opens, lighter calves, unexpected expenses.

-It gives us a cushion to work with.

Hedge, Put, Futures Contract, Which one do I use??

- What is the objective?
- What is your risk tolerance?
- What are your profit objectives?
- Is there a time to limit losses?
- Are you a straight up hedger?
- Is there a time to take profits? (Tyson Plant Fire?!)
- An experienced commodity broker is priceless.

-We are looking for opportunities to meet our economic objectives and make a difference in this world while pursuing our passion of caring for all of God's Creations

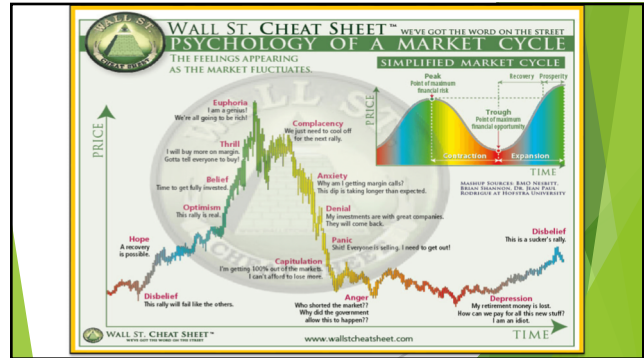
A Risk Management Wreck...and lessons learned..

Late Winter Early Spring 2017. Having just come through the largest cattle market decline we had experienced in our career, but had been profitable due to our risk management decisions...

Calves Purchased to run as yearlings, September Feeder Futures at \$125-127. Scared of going back into the teens(Mistake #1) and lots of market hype saying 'Its going lower!' Listening to someone who did not know my numbers(Mistake #2), We hedged at that level. SPRING STORMS! Futures to \$163! (Remember that \$40,000 Margin Call Check?!)

This Hurt. Then we droughted out. Instead of having 950lb yearlings we were talking of having 850lb yearlings. We were overhedged(Mistake #3) and paying margin calls on contracts that we no longer had the weight for. We learned...

1. Risk Management/Hedge Policy needs to go hand in hand with Drought Policy.
2. Don't get sucked into the hype, emotion and noise. This happens at tops and bottoms.



From a 10,000 ft. Perspective...

A Quote from our Broker: (This is not included in your proceedings paper, he sent an email with this in it, but it was after the proceedings paper was already sent. I think there is some very good wisdom in this quote.)

"Risk management has '0' to do with calling a broker and expecting an answer to 'what do you think of the market today?' It is simply about your bottom line. It is about arithmetic. It is about your net return, period. It is about doing your homework, having a hedge policy. All of this to say, many of you have erased from your mind all the stuff you have come to believe. All the research out there and all the brokers cannot 'predict' the highs and lows in cash and futures. So count on no one to be right about that."

-Opportunities come and go to manage your risk. You have be prepared to pull the trigger and take advantage of them when they happen. Do not get caught up in they hope of it going higher or lower.

Choose to Succeed!

-Somewhere out there, someone in each sector of the Cattle Industry is running a successful and profitable business

-We want to be that business. We have to be flexible to achieve this

"Success seems to be connected with action. Successful people keep moving. They make mistakes, but they don't quit."
-Conrad Hilton

Thank You!