Futures and Options
Live Cattle
Feeder Cattle

Tim Petry

Livestock Marketing Economist

NDSU Extension

www.ndsu.edu/livestockeconomcs

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Price Risk Management Tools

- Cash forward contract
- Video and internet auctions
- CME futures
- CME options
- Livestock Risk Protection (LRP)
- Livestock Gross Margin (LGM)
- Which one or combination fits your marketing plan?

Which Is Best?

Depends on expected price trend

Uptrend: cash market

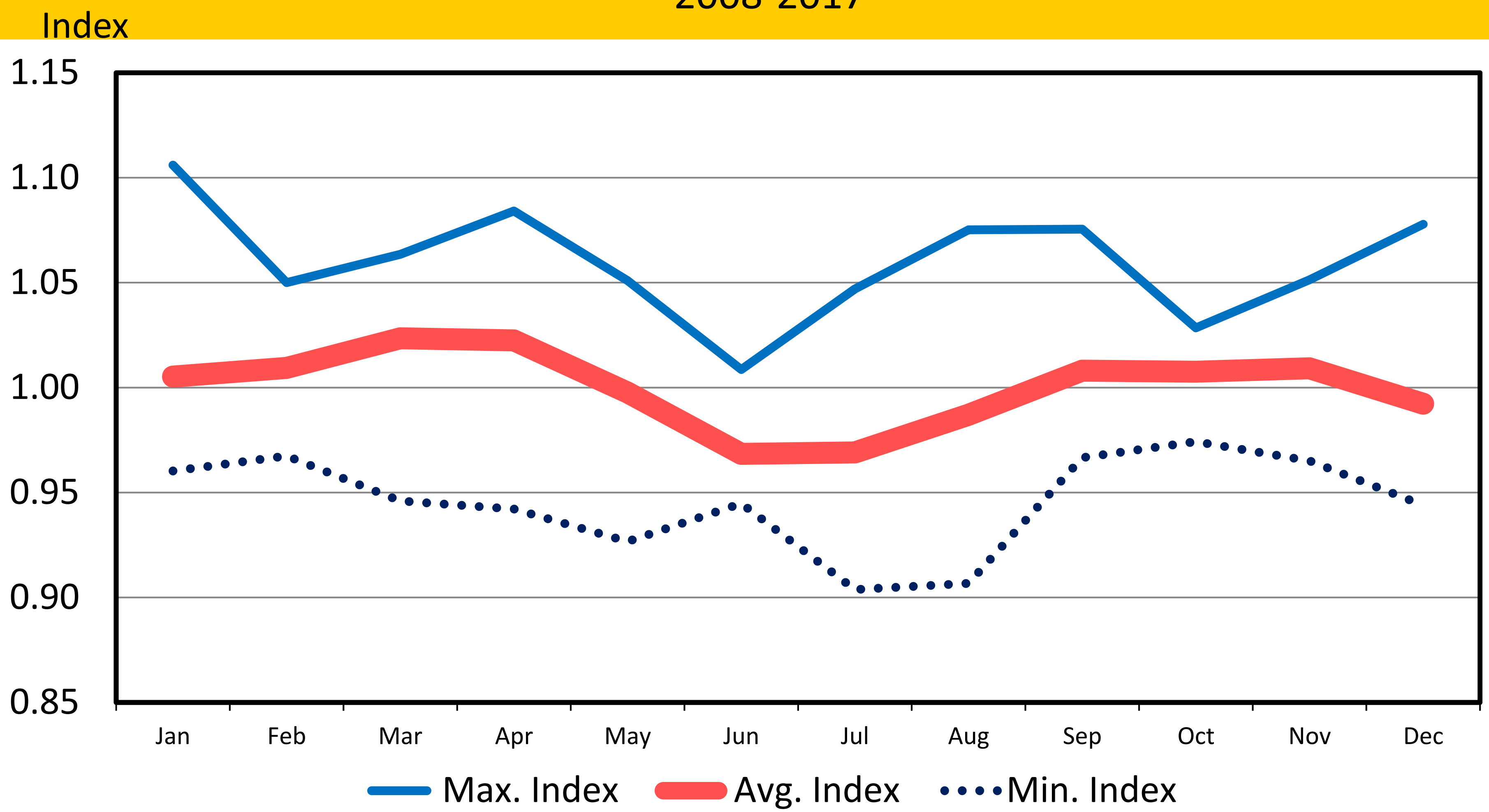
Downtrend: futures
cash forward contract
video and internet auction

?: options or LRP
(will always be 2nd best)

Live Cattle Contract

- 40,000 lbs, 400 cwt
- 1050 – 1500 lbs (36-28 hd) Steers and Heifers
- USDA Y.G.3, 60% Choice & 40% Select
- Feb, Apr, Jun, Aug, Oct, and Dec
- Delivery to stockyards or packing plant
- Daily limits: $3/cwt

SEASONAL PRICE INDEX – FED STEERS
2008-2017



Data Source: USDA-AMS, Compiled & Analysis by LMIC
Livestock Marketing Information Center

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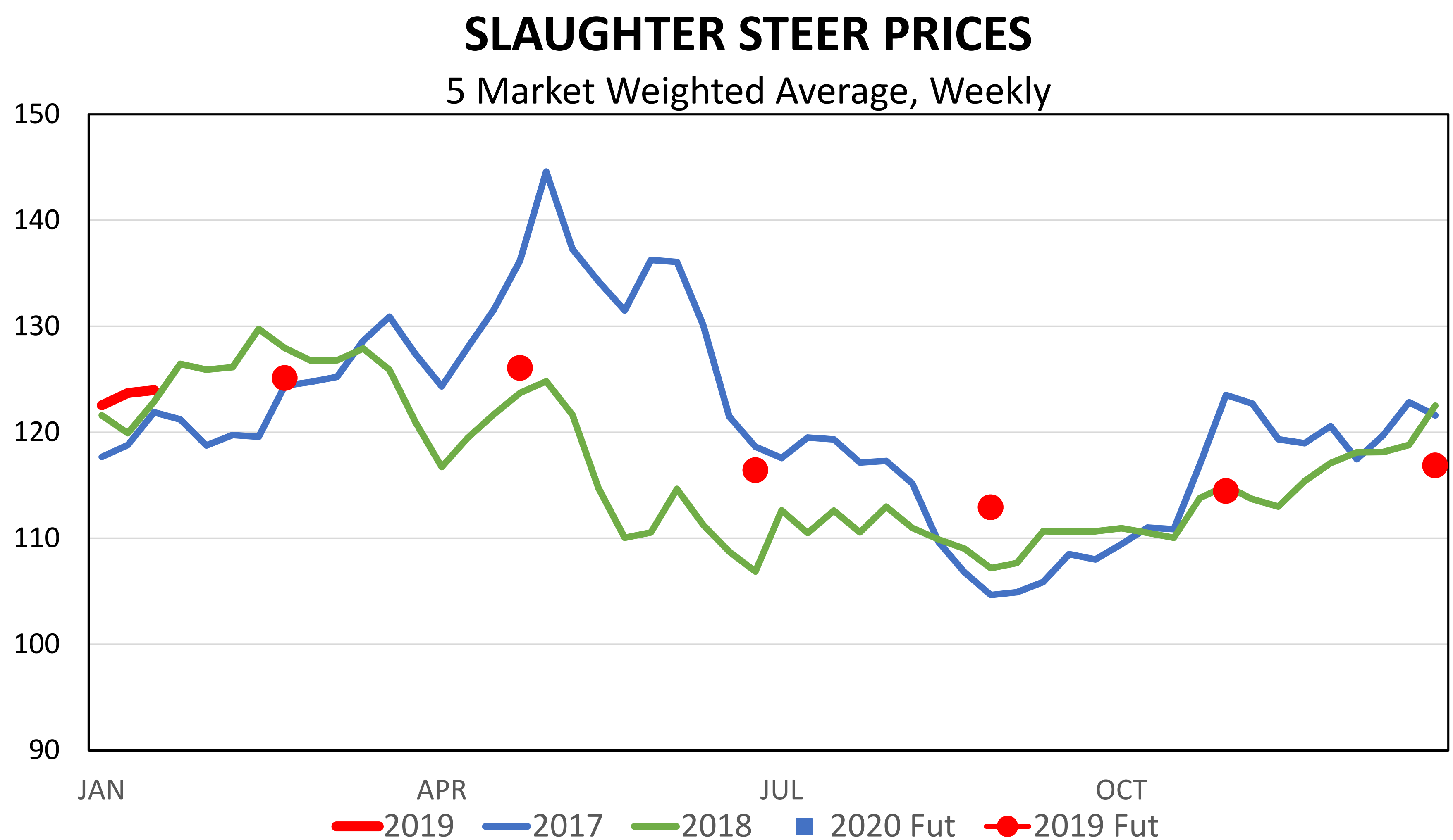
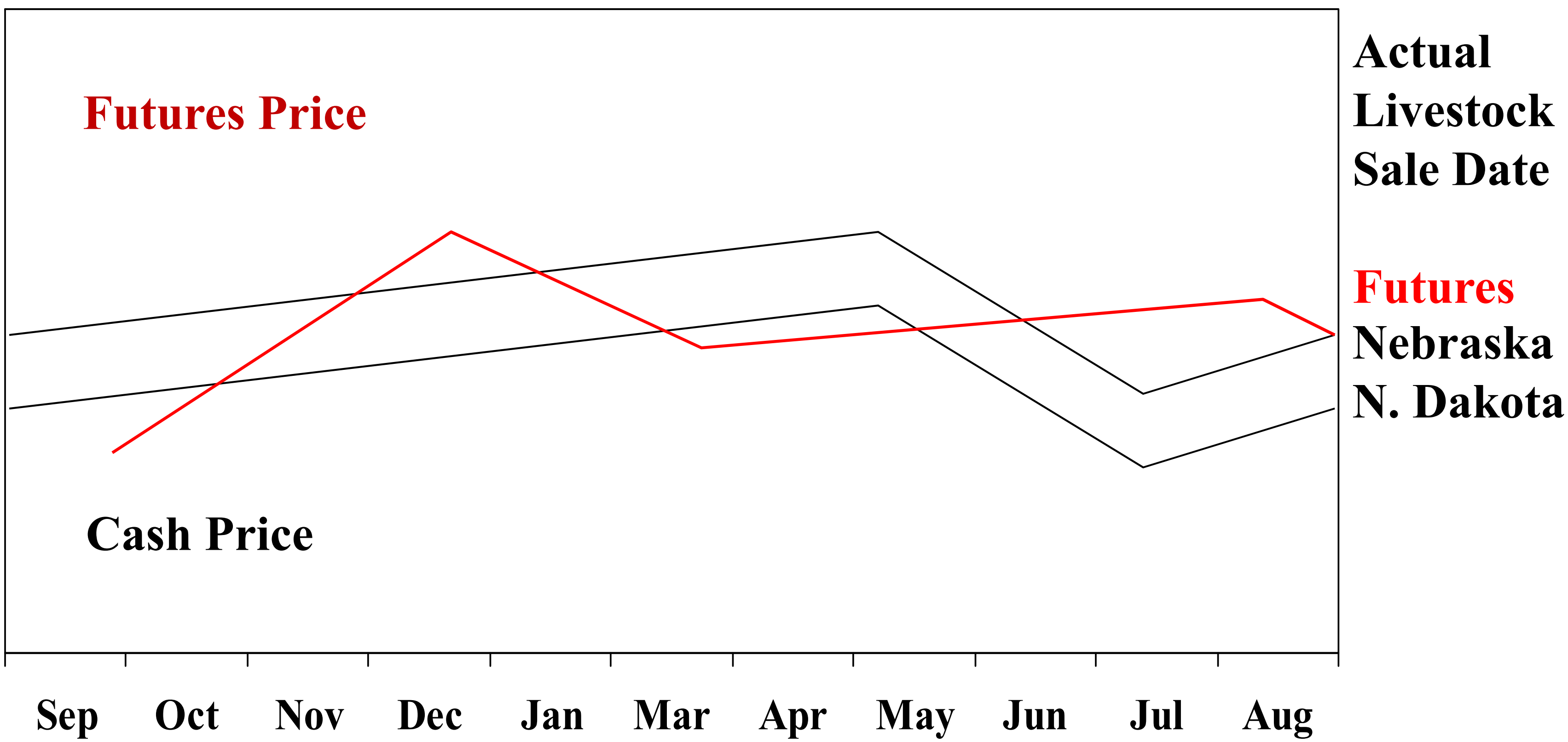

SLAUGHTER STEER PRICES
5 Market Weighted Average, Weekly
150
140
130
120
110
100
90
JAN
APR
JUL
OCT
2019
2017
2018
2020 Fut
2019 Fut

Live Cattle – April 2019-5 area USDA Weekly Cash

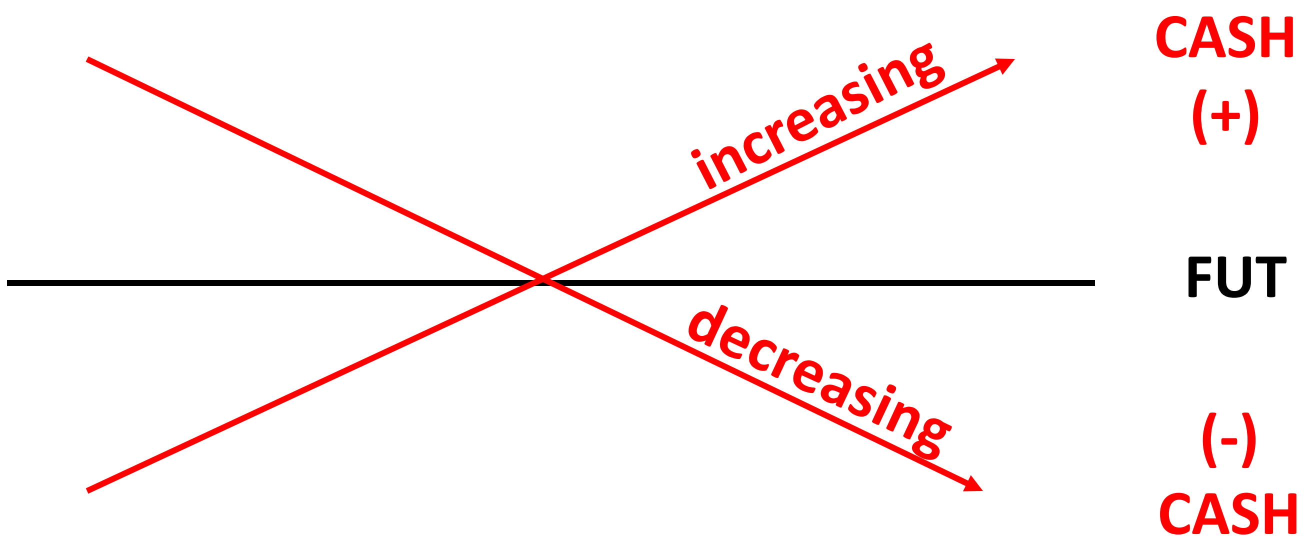
BASIS: Difference between cash price and futures price

Cash price - Futures price = basis



BASIS is difference between a cash price and the CME futures price.

HEDGING eliminates risk of adverse price movement, <u>except</u> for the risk of the basis being different than expected.



Futures Live Cattle Example
Fed Cattle for April Market
1300 lbs/31 hd / contract

	Jan
APR LC FUT	$126 / cwt
EXPECTED BASIS	-3
	123
BREAKEVEN	-118
BROKERAGE	- (included in BE)
EXPECTED PROFIT	5

April 22

	Price Decrease	Price Increase
Short	126	126
Long	117	131
	9	-5
Cash	114	128
BE	118	118
	-4	10
Profit	5	5

April 22

	Price Decrease			Price Increase		
Short	$126			$126		
Long	117			131		
	9	BASIS		-5		
		INC	DEC		INC	DEC
Cash	114	115	113	128	129	127
BE	118	118	118	118	118	118
	-4	-3	-5	10	11	9
Profit	5	6	4	5	6	4

Options

- Similar to an insurance policy
- PUT: right to a short futures contract
- CALL: right to a long futures contract
- Buyer pays market determined premium
- Seller receives premium

Live Cattle Options

- Feb, Apr, Jun, Aug, Oct, Dec
- (NEW) Jan, Mar, May, Jul, Sep, Nov
- Strike prices available in $2/cwt intervals nearby contracts may have $1/cwt intervals
- Terminate on first Friday of contract month

April Put Strike Prices

$90 - $144

	PRICE	PREM
At the money	126	$3
In the money	132	$8
Out of the money	118 BE	$1

Why use options?

- Minimum price established for bear market, but can receive higher prices if bull market

Price ▲ <u>cash</u>

Price ▼ <u>futures</u>

Price ? <u>options</u>

Options will always be 2nd best

Put Option
(same assumption as previous)

	Jan
APR LC PUT	$126
PREMIUM	-3
EXPECTED BASIS	-3
BROKERAGE	
MINIMUM EXPECTED PRICE	120
BREAKEVEN	118
MINIMUM EXPECTED PROFIT	2

April 5 (First Friday)

	Price Decrease	Price Increase
APR PUT	126	126
APR FUT	117	131
PUT VALUE	9	0
PREM	-3	-3
	6	-3
CASH	114	128
BE	118	118
	-4	10
PROFIT	2	7

Summary

	Price Decrease	Price Increase
CASH	-4	10
OPTION	2	7
FUTURES	5	5

Some Packers Offer Futures-based Forward Contracts

- No need for broker, margins, etc.
- Price is + or – futures contract price
- Other specifications

LM_CT153
St. Joseph, MO   Mon Jan 21, 2019   USDA Market News

NATIONAL WEEKLY DIRECT SLAUGHTER CATTLE - PRIOR WEEK SLAUGHTER AND CONTRACT PURCHASES

For Week Ending Sunday, 01/20/2019

D: BASIS DISTRIBUTION

Delivery Mo./Basis Mo.   Apr '19/Apr

80 head	=	-19.00
228 head	=	-17.00
70 head	=	-2.50
338 head	=	-1.00
476 head	=	-0.50
1,814 head	=	0.00
1,048 head	=	+0.50
2,499 head	=	+1.00
2,665 head	=	+2.00
1,320 head	=	+4.00

May '19/Jun

350 head	=	-15.00
350 head	=	-12.00
440 head	=	+0.50
109 head	=	+1.00
158 head	=	+2.00
249 head	=	+3.00
498 head	=	+4.00
370 head	=	+5.00
1,000 head	=	+7.00

LV CATTLE FUT

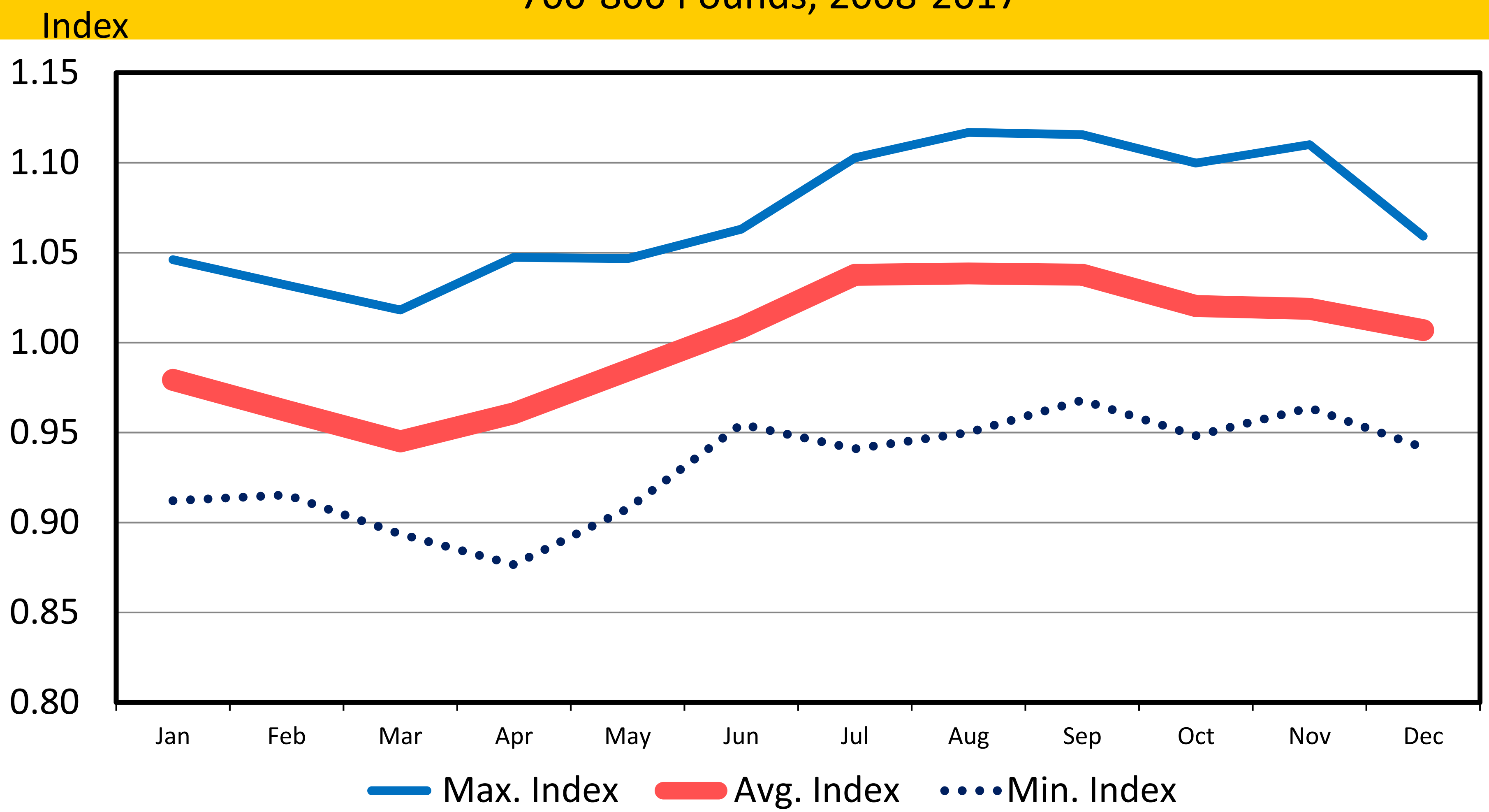
FEB19	126.52
APR19	127.37
JUN19	117.45

Feeder Cattle Contract

- 50,000 lbs, 500 cwt
- 700-899 lbs (72-56 hd) steers
- USDA Medium and Large Frame, #1
- Jan, Mar, Apr, May, Aug, Sep, Oct, Nov
- Cash settlement with CME Index
- Daily limits: $4.50/cwt

SEASONAL PRICE INDEX – FEEDER STEERS

700-800 Pounds, 2008-2017



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Feeder Cattle – March 2019 and CME Index

Feeder Cattle Options

- Jan, Mar, Apr, May, Aug, Sep, Oct, Nov
  (same as futures)
- Strike price available in $2/cwt intervals
  nearby two contracts at $1/cwt intervals
  expiring contract may have $0.50/cwt intervals
- Terminate on last Thursday of contract month
  same day as futures expire and cash settlement

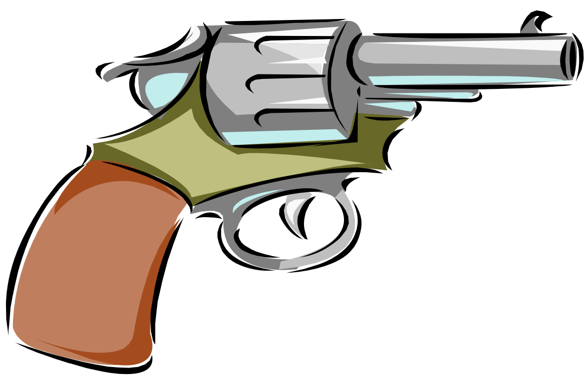
- Margin, not price level is important
- Both feed and cattle prices could be locked in
- Futures projected feeding potential

	FUT	BASIS	EXPECTED PRICE
Mar FC	141	0	1.41
Mar Corn	3.79	-.60	3.19
Oct LC	115	-1	114

FC	750 @ 1.41	=	$1,057.50
CORN	65 @ 2.90	=	207.35
OTHER		=	152.65

$$\frac{\text{Total Costs}}{\text{Total cwt.}} = \text{BE} = \frac{1{,}417.50}{13.5} = 105$$

When should I pull the trigger?



Most difficult part of using Futures and Options

Questions?