

**Kansas Society of
Farm Managers and
Rural Appraisers
55th Annual
Winter Meeting &
Pre-Meeting Seminar
February 21-23, 2018**



**USPAP Pre-Meeting
Seminar Hosted by
Kansas Chapter ASFMRA
February 21 2017
Rolling Hills Zoo, Salina,
KS**

Beef-Cattle Outlook & Deeper Look at Data Quality

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AgManager
.info

Overarching Beef Industry Economic Outlook

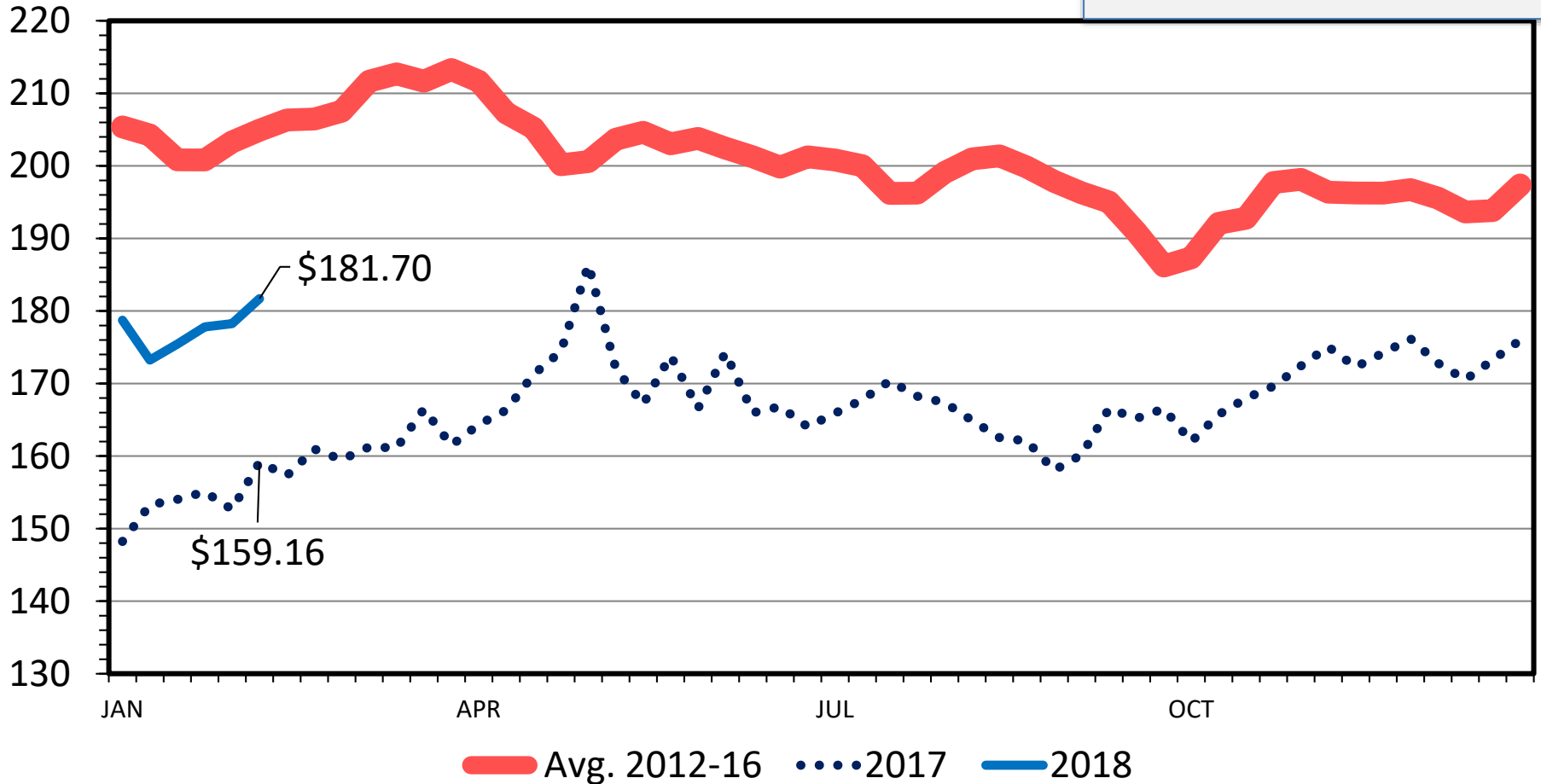
- Supplies
 - Beef Production Up
 - +6.4% in 2016, +3.8% in 2017, +4.7% in 2018, +1.8% in 2019
- Demand
 - Key to surprising prices in 2017
 - Q4: Production +2%; Fed Prices +9% & Calf Prices +23%
 - Exports continue to be key
 - >\$250/hd value since 2014 (USMEF)

Beef Basis, Sioux Falls SD
2018 Projections
(as of 2/18/18):
Oct. 17: \$182

MED. & LRG. #1 STEER CALF PRICES

500-600 Pounds, Southern Plains, Weekly

\$ Per Cwt.



Data Source: USDA-AMS

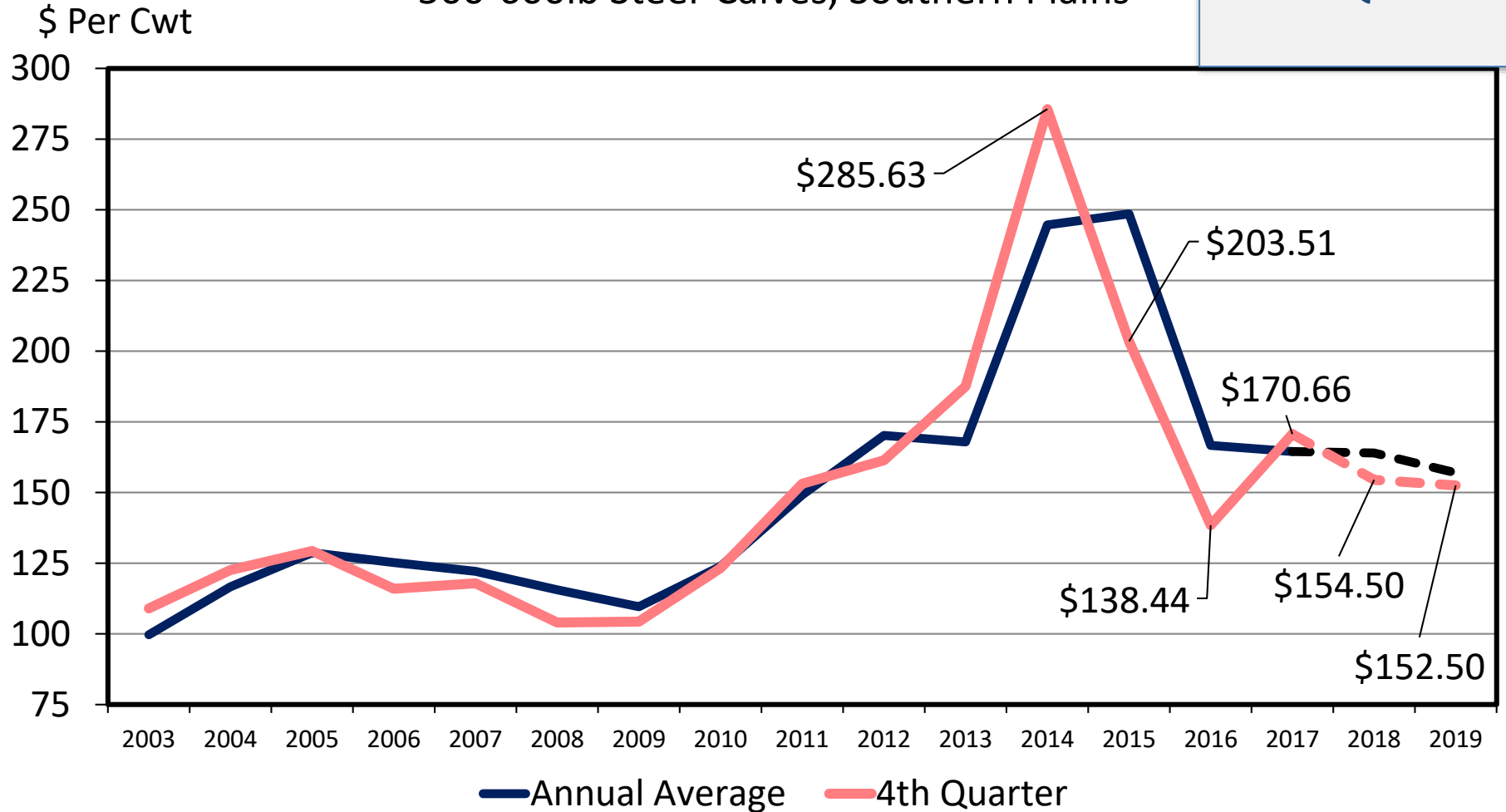
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C-P-54
02/12/18

LMIC Projections
~\$25/cwt lower
for Q4.2018

AVERAGE CALF PRICES

500-600lb Steer Calves, Southern Plains



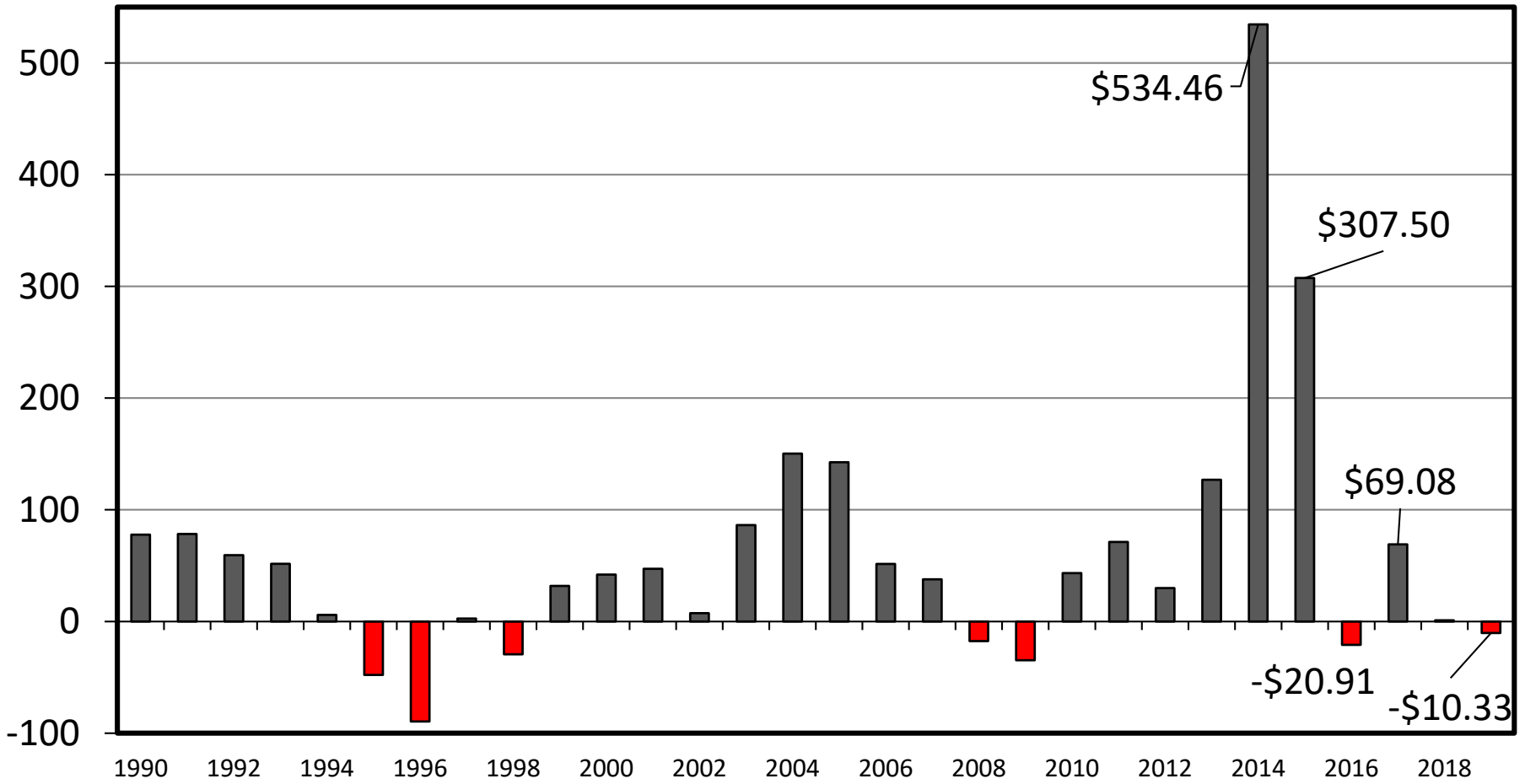
Data Source: USDA-AMS, Compiled and Forecasts by LMIC

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ESTIMATED AVERAGE COW CALF RETURNS

Returns Over Cash Cost (Includes Pasture Rent), Annual

\$ Per Cow



Data Source: USDA & LMIC, Compiled by LMIC

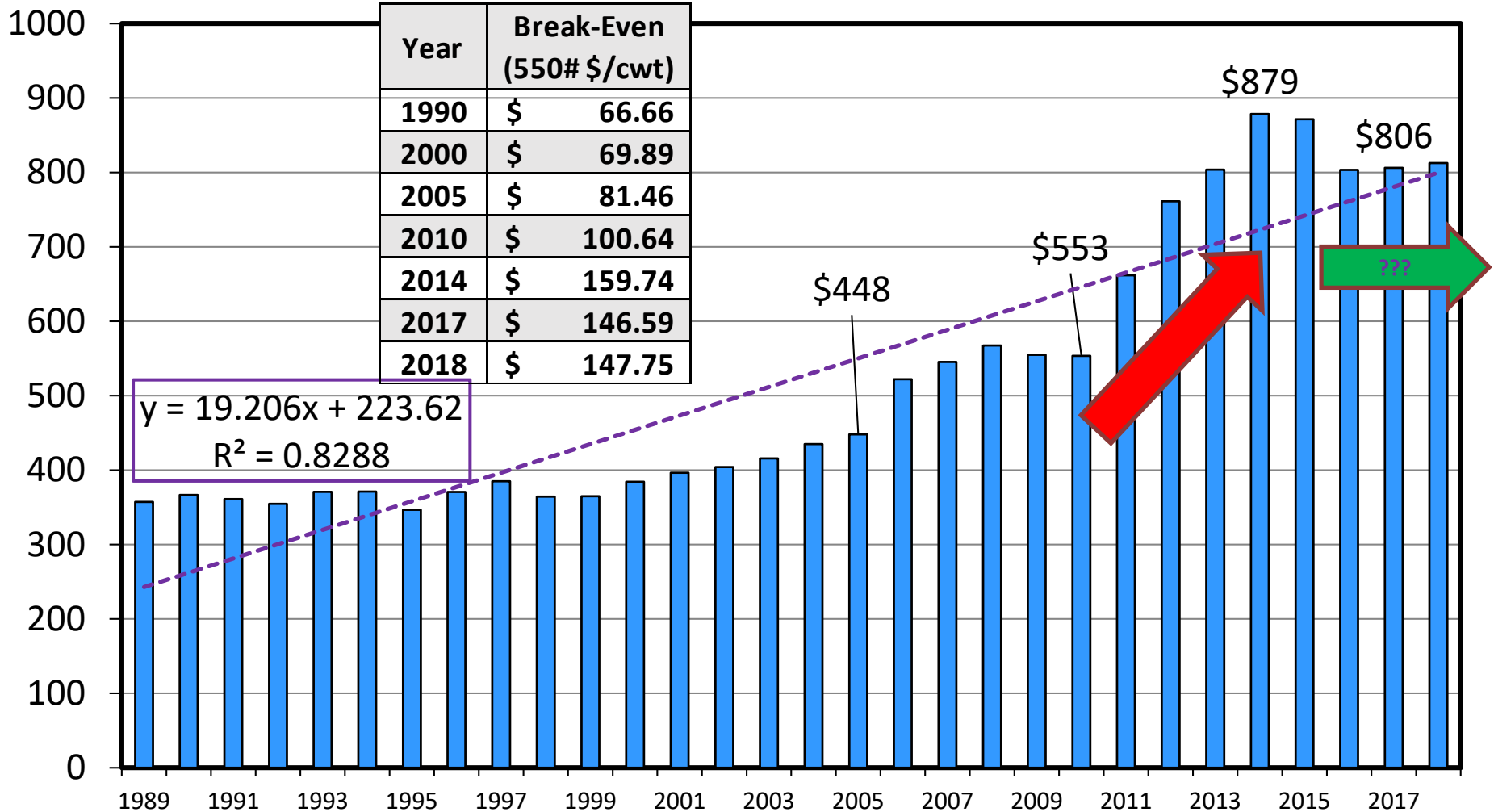
Livestock Marketing Information Center

C-P-66
02/08/18

ESTIMATED AVERAGE COW CALF COSTS

Total Cash Cost Plus Pasture Rent, Annual

\$ Per Cow



Data Source: USDA & LMIC, Compiled by LMIC

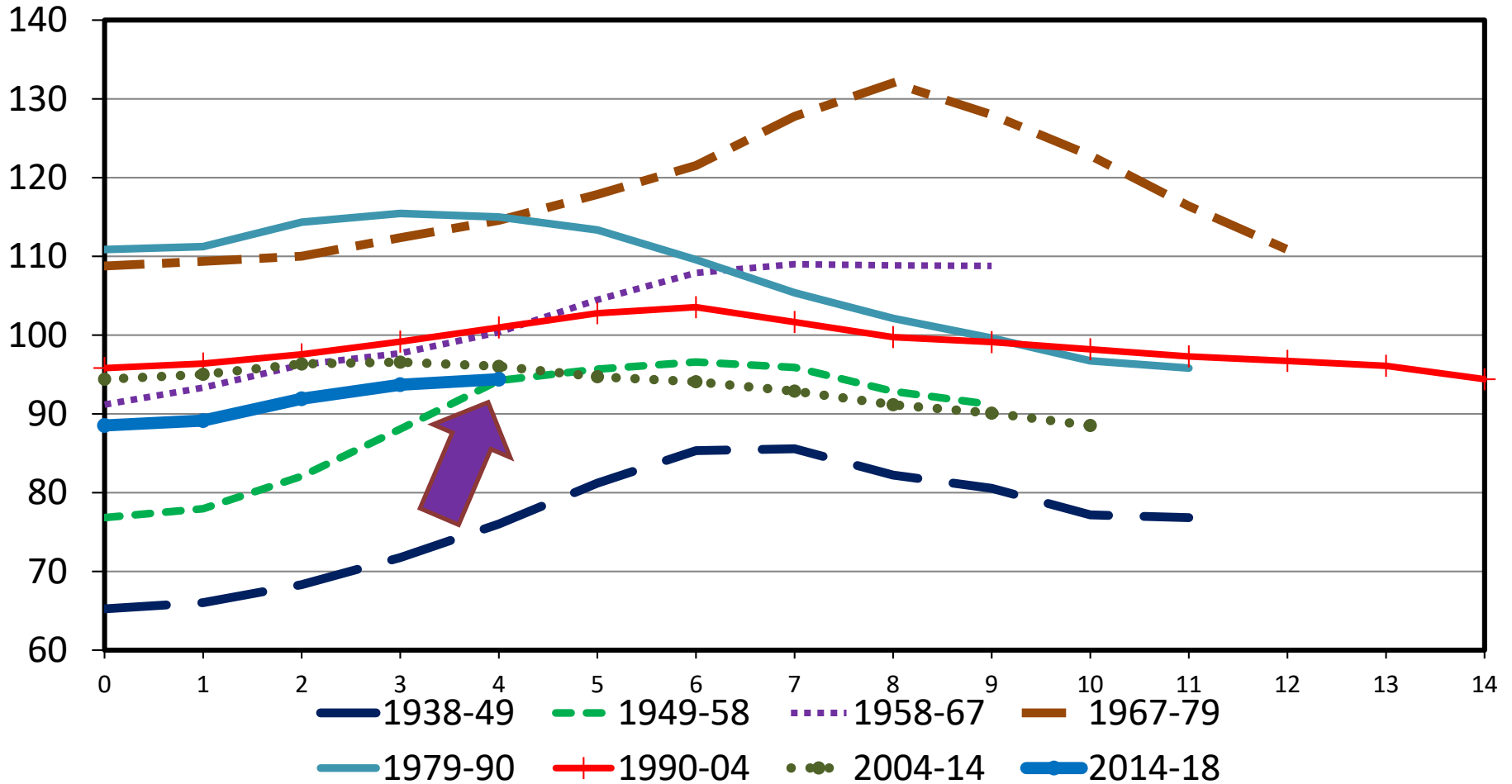
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TOTAL CATTLE INVENTORY BY CYCLE

U.S., January 1

Mil. Head

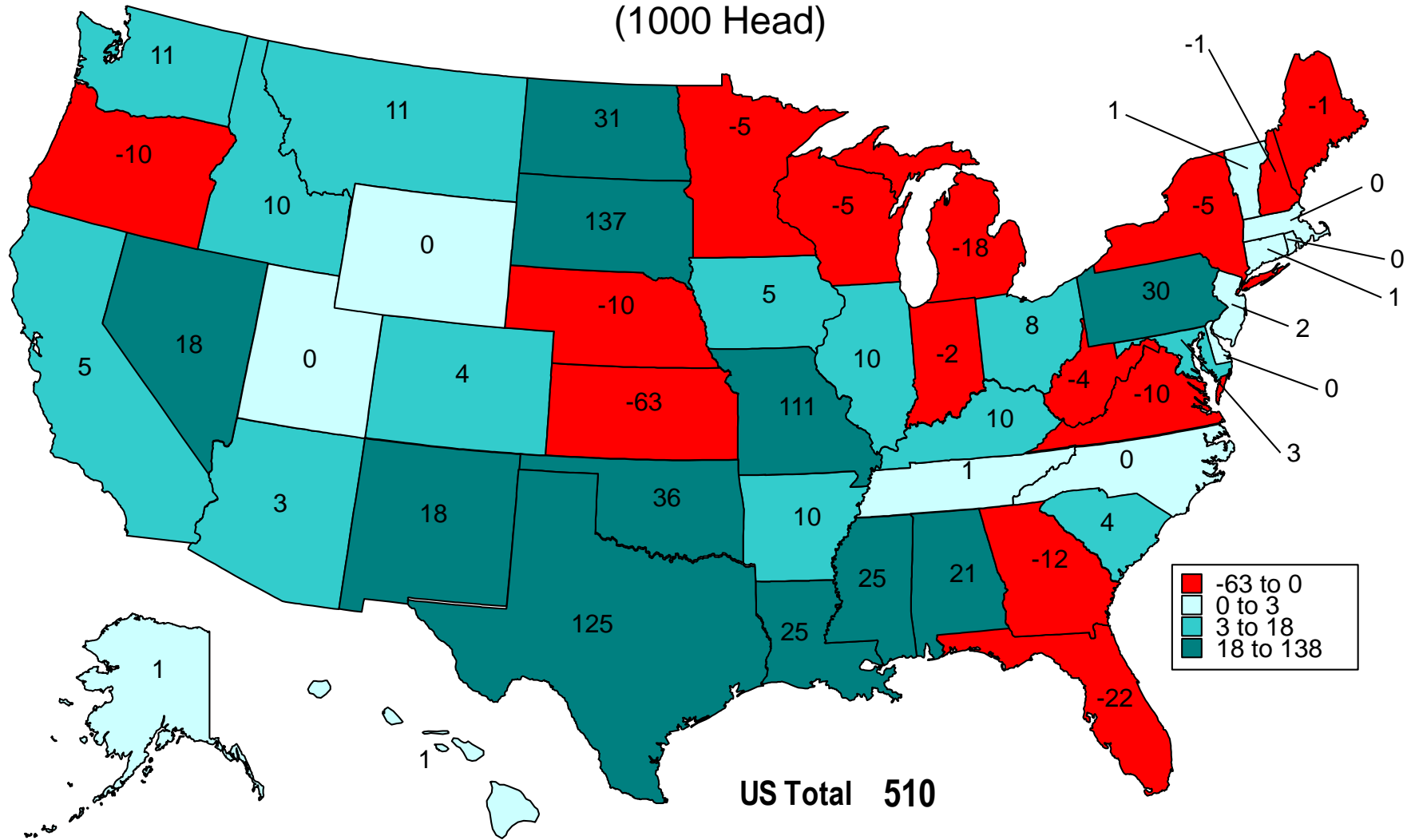


Data Source: USDA-NASS

Livestock Marketing Information Center

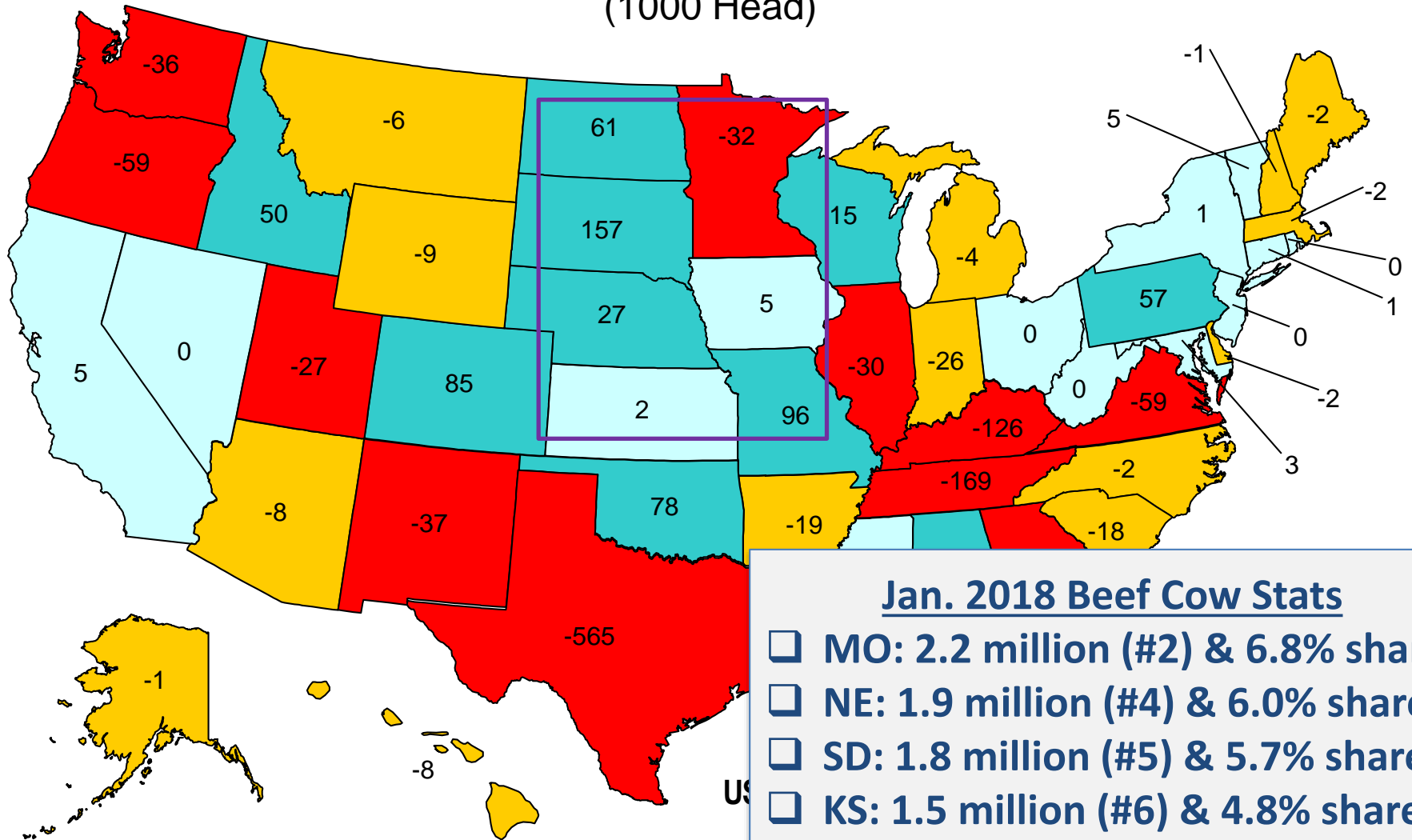
C-N-40
02/16/18

CHANGE IN BEEF COWS NUMBERS 2017 TO 2018 (1000 Head)



CHANGE IN BEEF COWS NUMBERS 2008 TO 2018

(1000 Head)



Jan. 2018 Beef Cow Stats

- MO: 2.2 million (#2) & 6.8% share
- NE: 1.9 million (#4) & 6.0% share
- SD: 1.8 million (#5) & 5.7% share
- KS: 1.5 million (#6) & 4.8% share
- ND: 985k (#9) & 3.1% share
- IA: 970k (#10) & 3.1% share

CHANGE IN BEEF COWS NUMBERS 2008 TO 2018

(1000 Head)

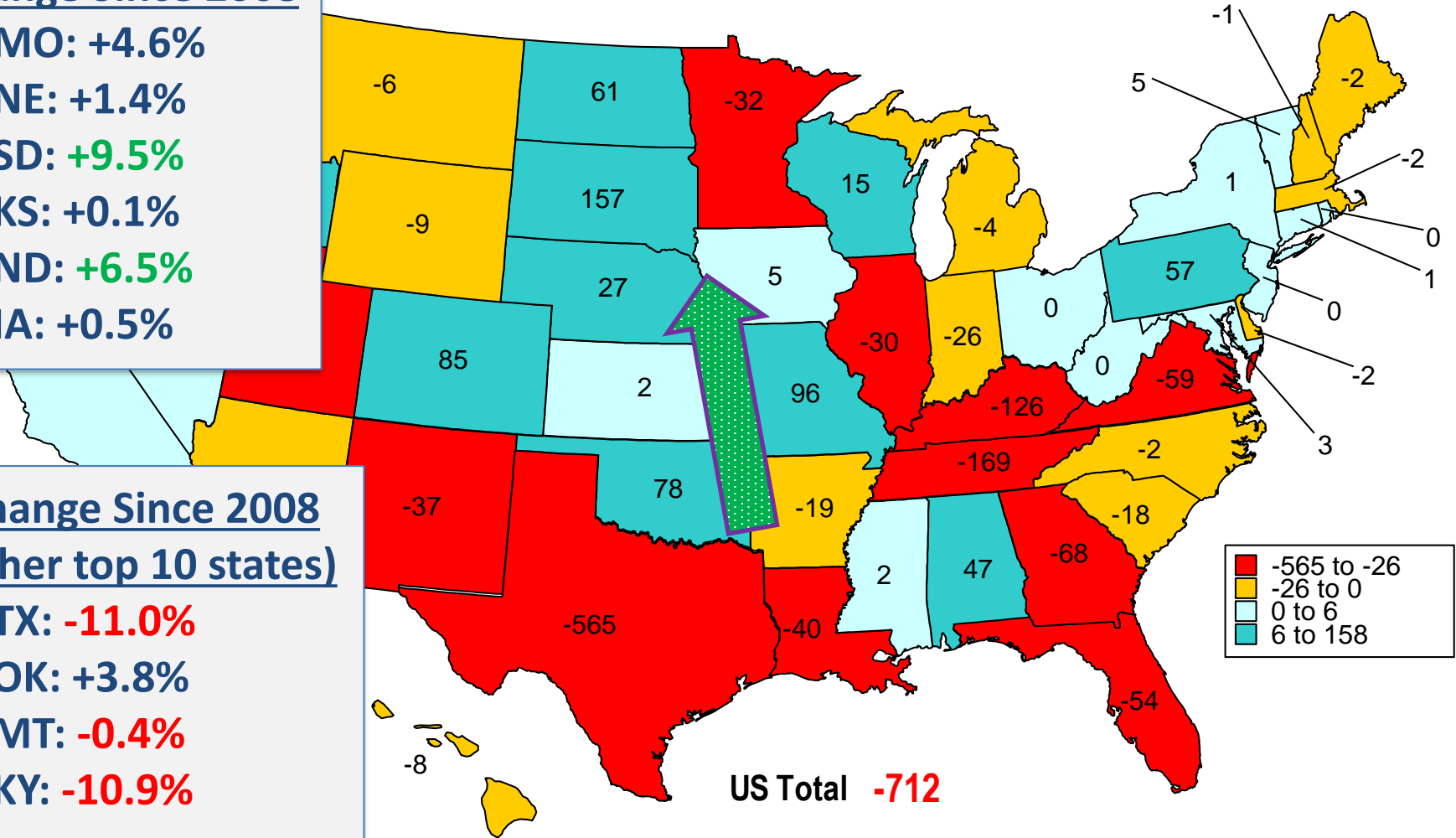
Change Since 2008

- MO: +4.6%
- NE: +1.4%
- SD: +9.5%
- KS: +0.1%
- ND: +6.5%
- IA: +0.5%

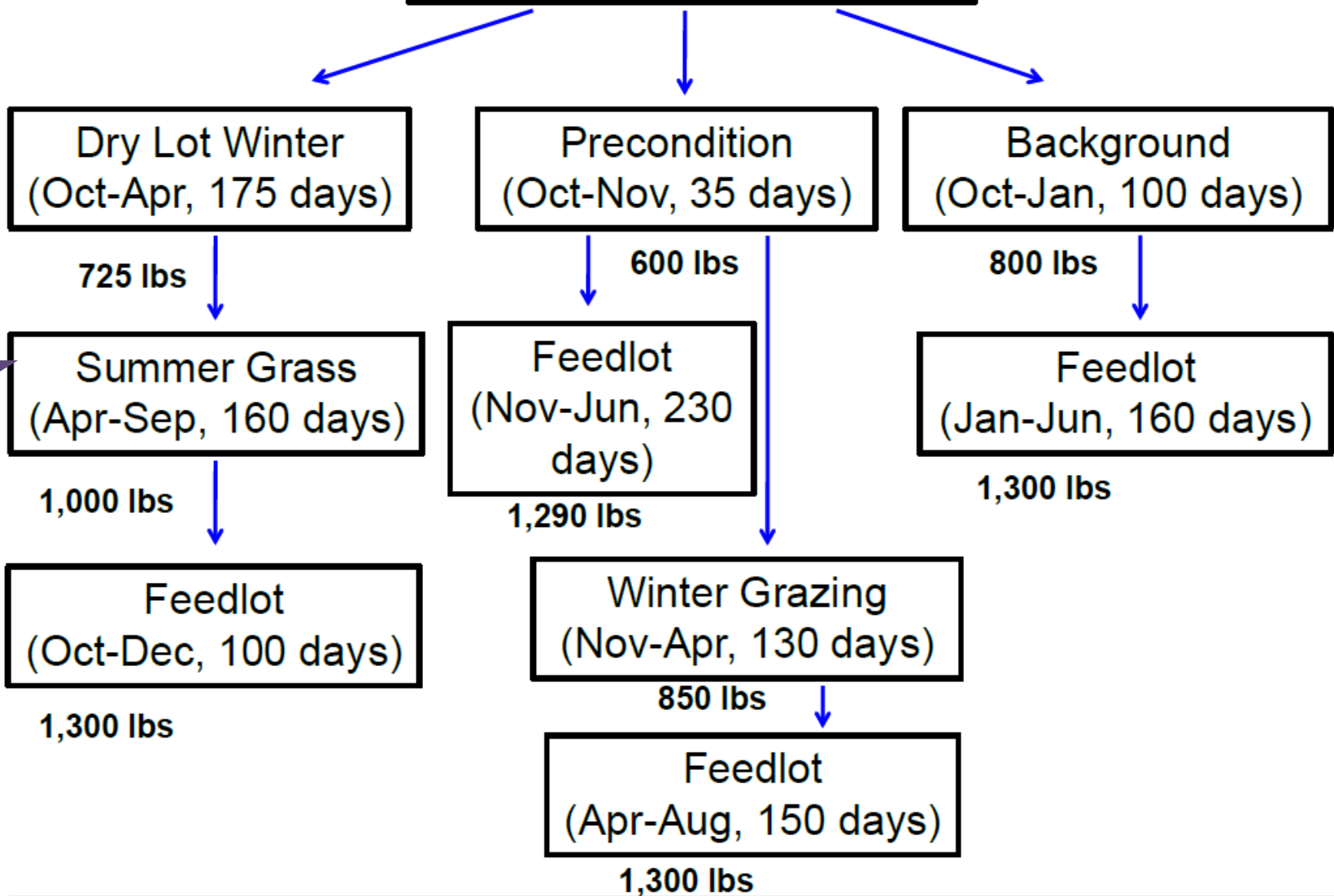
Change Since 2008 (other top 10 states)

- TX: -11.0%
- OK: +3.8%
- MT: -0.4%
- KY: -10.9%

US: -2.2%



Fall Weaned 550# Calf



Economic Outlook Overview: Post Weaning *Forward-Looking Margin Perspective*

<http://www.beefbasis.com/VOG.aspx>

- Sioux Falls, SD *2/18/18* situation:

SUMMER GRASS

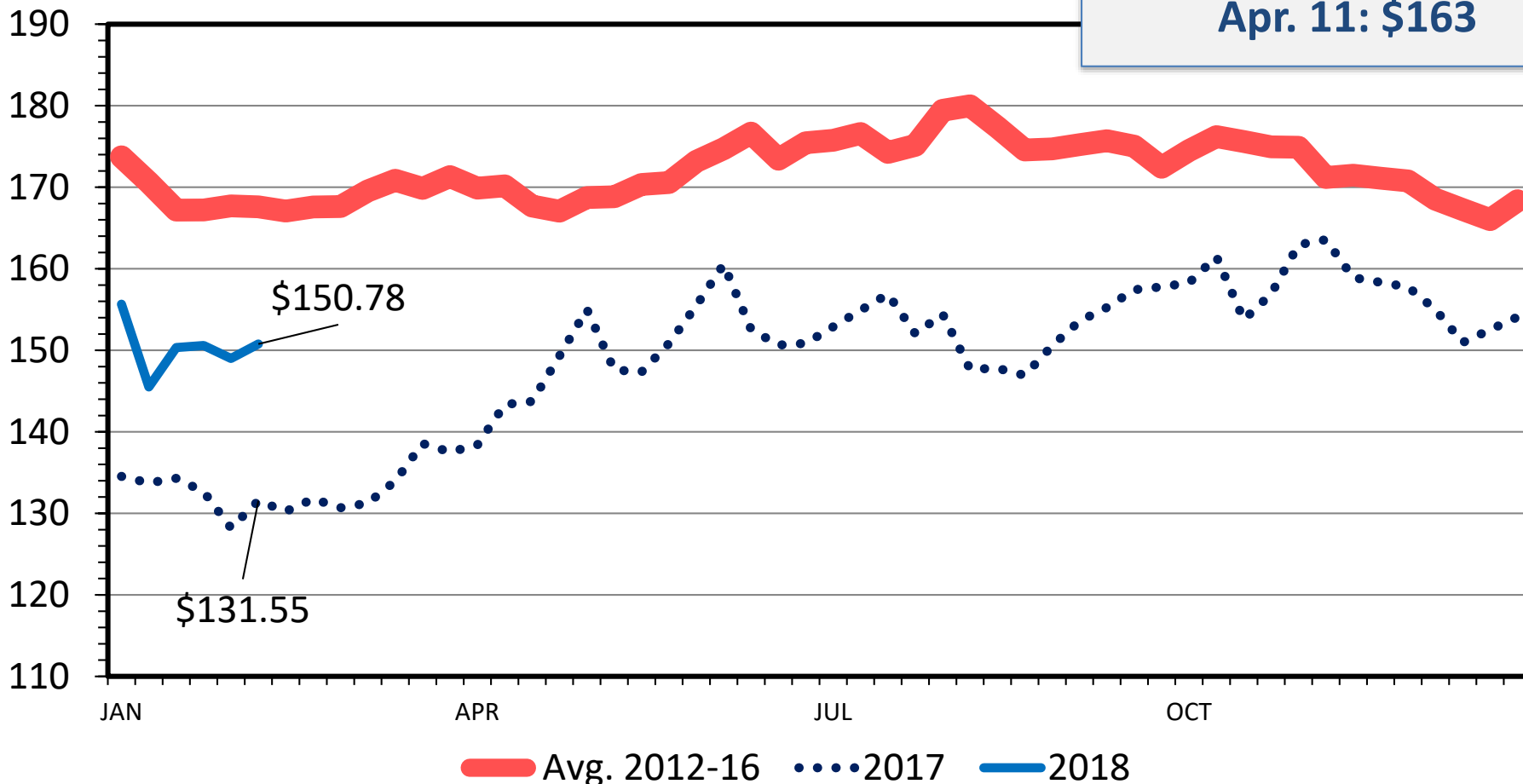
- Buy 725 lb steer on 04/04/18 (\$166)
- Sell 1,000 lb steer on 9/05/18 (\$153) {1.8 ADG}
- VOG: \$116/cwt
 - *Drought Monitor will have a say in COG...*

**Beef Basis, Sioux Falls SD
2018 Projections
(as of 2/18/18):
Mar. 14: \$160
Apr. 11: \$163**

MED. & LRG. #1 FEEDER STEER PRICES

700-800 Pounds, Southern Plains, Weekly

\$ Per Cwt.



Data Source: USDA-AMS

Livestock Marketing Information Center

C-P-49
02/12/18

Economic Outlook Overview: Feedlots

- 2017 MUCH better than anticipated
- 2018 projections reflect higher placement costs

Historical and Projected Kansas Feedlot Net Returns (as of 2/12/18')

(<http://www.agmanager.info/livestock/marketing/outlook/newsletters/FinishingReturns/default.asp>)

Dec. 17': -\$11/steer

Table 1. Projected Values for Finishing Steers in Kansas Feedyards*

Closeout Mo-Yr	Net Return	FCOG**	Fed Price	Fed Futures	Fed Basis	Feeder Price	Breakeven FCOG**	Breakeven Fed Price	Breakeven Feeder Price
Jan-18	10.93	81.48	123.68	121.53	2.15	151.27	83.29	122.89	152.66
Feb-18	56.92	81.24	126.42	125.00	1.42	150.93	90.64	122.31	158.25
Mar-18	82.00	80.18	128.68	125.00	3.68	153.78	93.48	122.72	164.58
Apr-18	-94.84	81.67	119.45	116.73	2.72	158.28	65.41	126.58	145.57
May-18	-70.12	86.62	124.45	116.73	7.72	159.15	74.60	129.70	149.82
Jun-18	-90.78	85.18	117.08	113.80	3.28	150.40	69.27	123.98	138.19
Jul-18	-68.47	84.52	116.10	113.80	2.30	147.42	73.19	121.16	138.26
Aug-18	-45.08	83.67	116.78	115.48	1.31	148.45	76.54	120.10	142.27
Sep-18	-88.69	85.10	115.91	115.48	0.43	150.26	71.07	122.32	138.44
Oct-18	-137.33	85.94	118.23	117.53	0.70	153.88	61.67	128.08	137.30

Representative Barometer for Trends in Profitability

Quarterly Forecasts (LMIC: 2/8/18)

Year Quarter	Comm'l Slaughter	% Chg. from Year Ago	Average Dressed Weight	% Chg. from Year Ago	Comm'l Beef Production	% Chg. from Year Ago
2017						
I	7,711	7.3	817.0	-1.1	6,300	6.1
II	8,074	5.8	793.2	-2.2	6,404	3.5
III	8,249	5.2	815.9	-1.1	6,731	4.0
IV	8,141	2.8	827.7	-1.1	6,738	1.7
Year	32,175	5.2	813.5	-1.4	26,173	3.8
2018						
I	7,967	3.3	821.4	0.5	6,544	3.9
II	8,427	4.4	807.9	1.9	6,808	6.3
III	8,571	3.9	824.4	1.0	7,066	5.0
IV	8,366	2.8	835.1	0.9	6,987	3.7
Year	33,331	3.6	822.2	1.1	27,405	4.7
2019						
I	7,957	-0.1	826.7	0.6	6,578	0.5
II	8,515	1.0	813.6	0.7	6,928	1.8
III	8,798	2.6	830.5	0.7	7,307	3.4
IV	8,440	0.9	840.4	0.6	7,093	1.5
Year	33,710	1.1	827.8	0.7	27,905	1.8

Quarterly Forecasts (LMIC: 2/8/18)

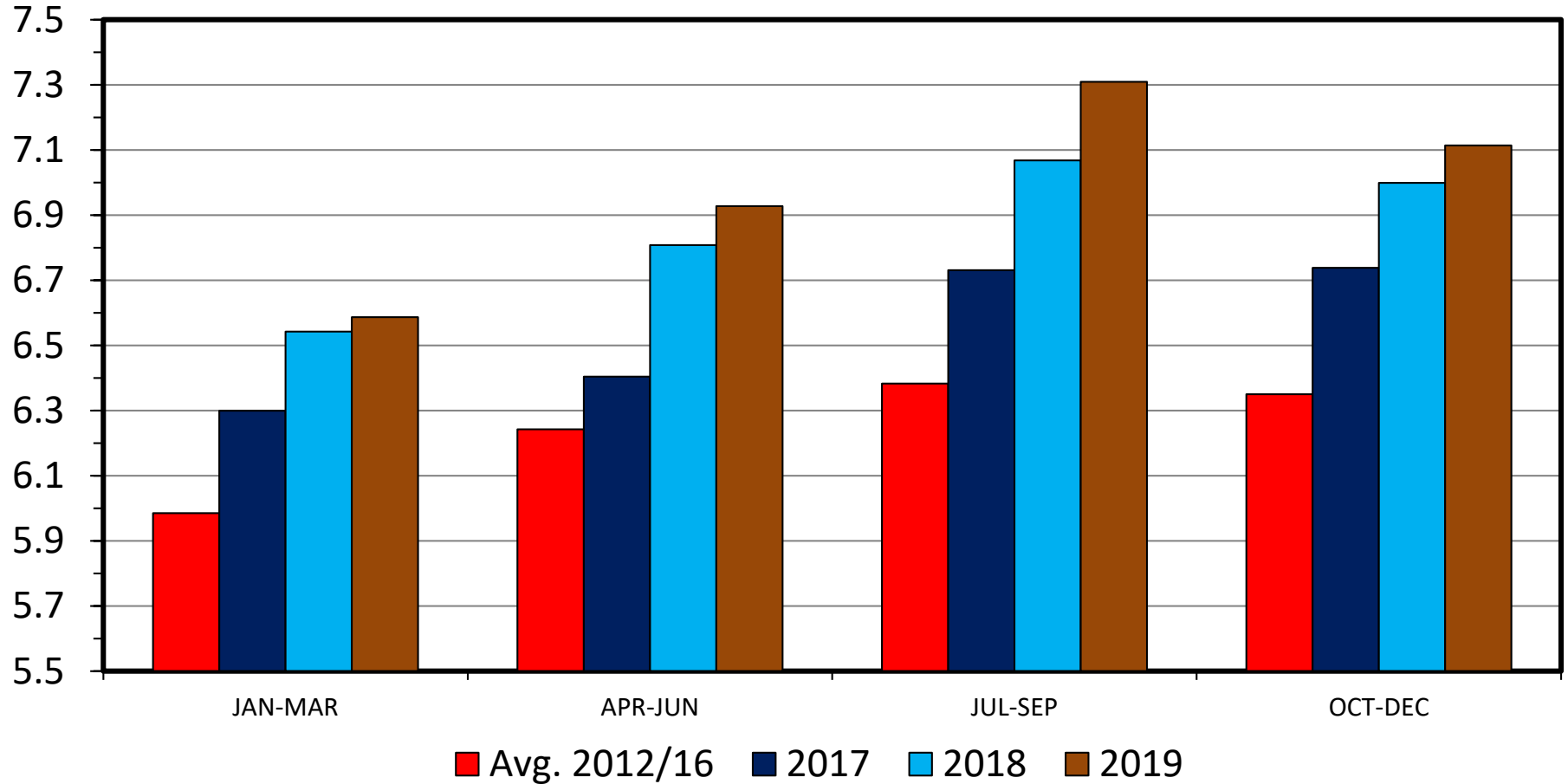
	Live Sltr.	% Chg.	Feeder Steer Price	
Year	Steer Price	from	Southern Plains	
Quarter	5-Mkt Avg	Year Ago	7-800#	5-600#
2017				
I	122.96	-8.8	132.88	157.38
II	132.76	4.0	149.30	170.49
III	112	-0.6	153	165
IV	118	9.1	157	171
Year	122	0.5	148	166
2018				
I	120-122	-1.6	148-151	168-172
II	121-124	-7.7	145-149	166-171
III	107-111	-3.1	140-145	159-165
IV	111-116	-3.7	138-144	151-158
Year	115-118	-4.1	143-147	161-167
2019				
I	117-123	-0.8	138-145	154-162
II	117-124	-1.6	137-145	156-165
III	106-114	0.9	133-142	151-161
IV	107-116	-1.8	130-140	147-158
Year	113-118	-0.9	136-142	153-161

Meat Supplies & Trade

COMMERCIAL BEEF PRODUCTION

US, Quarterly

Bil. Pounds



Data Source: USDA-NASS, Forecasts by LMIC

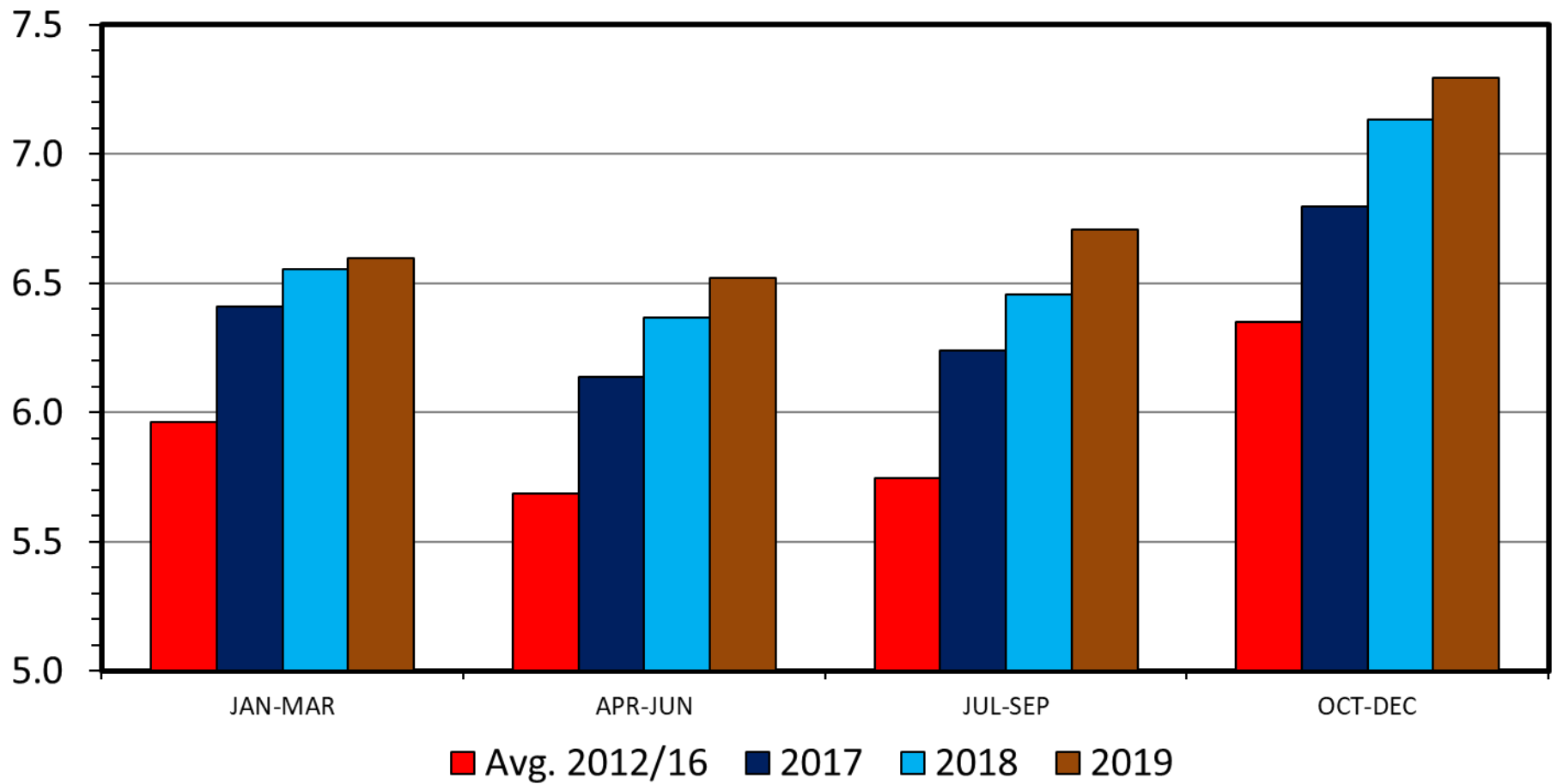
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M-S-01
02/07/18

COMMERCIAL PORK PRODUCTION

US, Quarterly

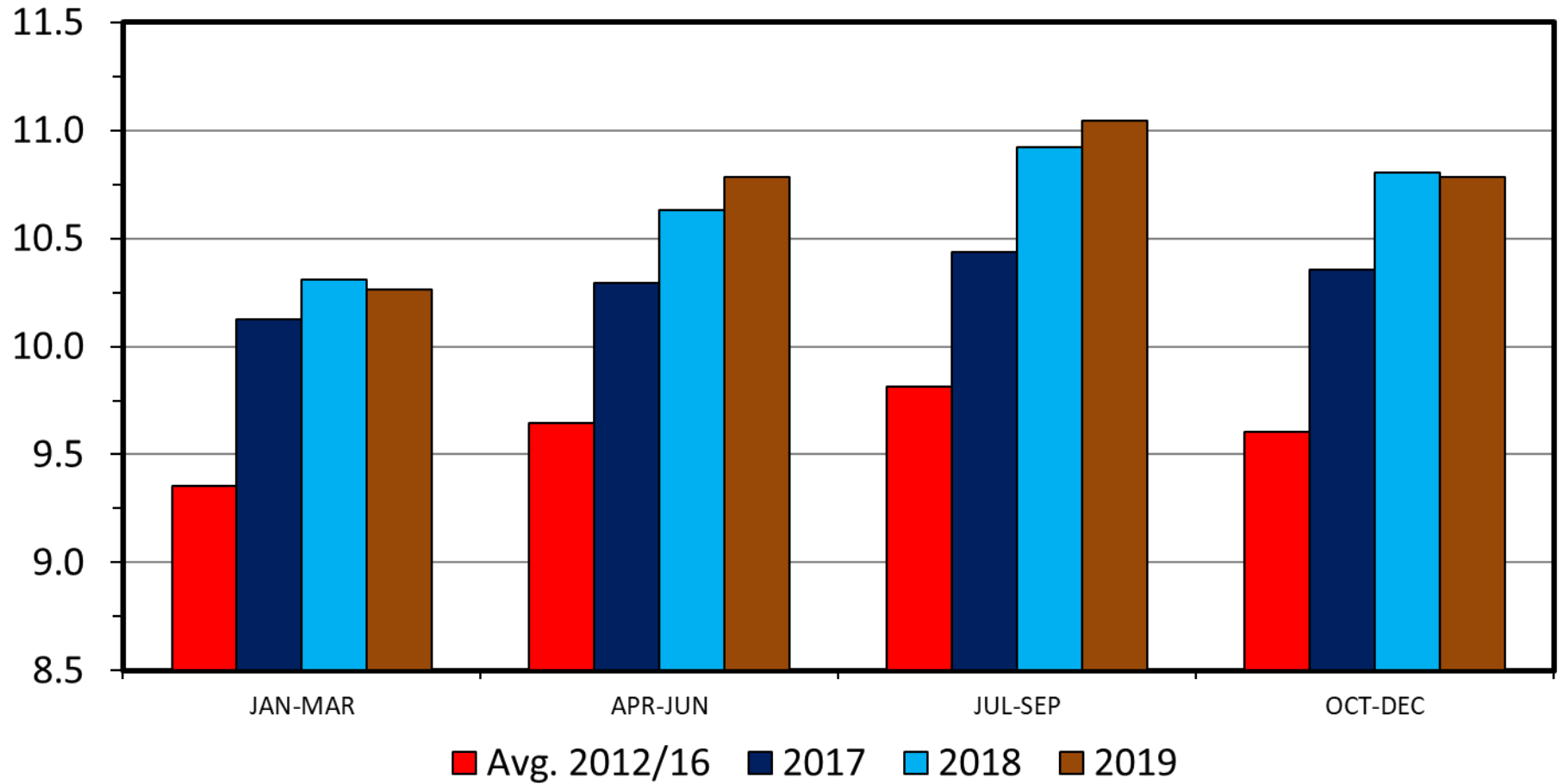
Bil. Pounds



RTC BROILER PRODUCTION

US, Quarterly

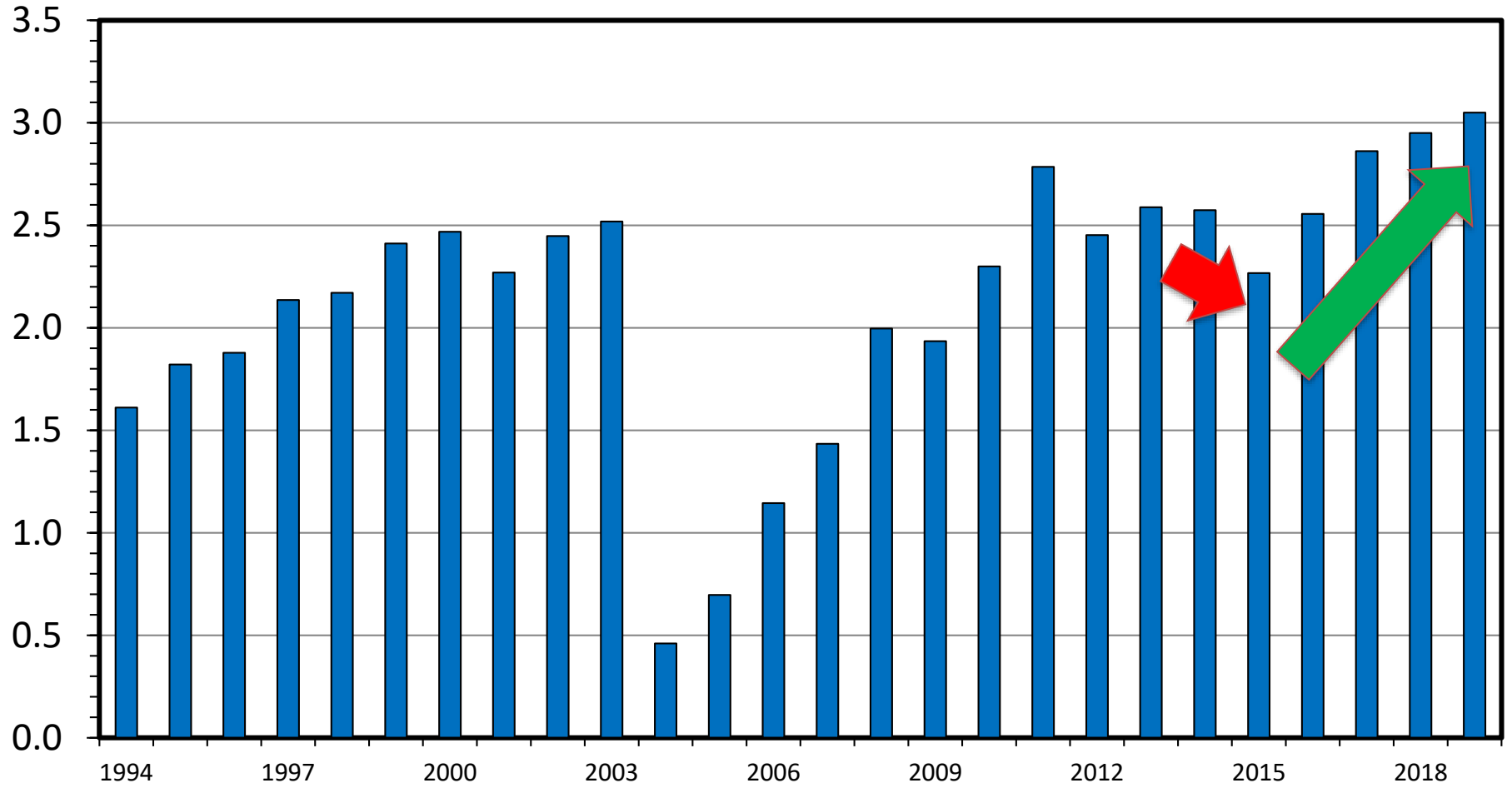
Bil. Pounds



US BEEF AND VEAL EXPORTS

Carcass Weight, Annual

Bil. Pounds



Data Source: USDA-ERS & USDA-FAS, Compiled and Forecasts by LMIC

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I-N-06
02/07/18

USDA Long-Term projections

Feb. 2018 report (<http://www.usda.gov/oce/commodity/projections/>)

Per capita meat consumption, retail weight							
Item	2016	2017	2018	2019	2020	2027	
Beef	55.6	57.3	59.2	60.9	60.9	59.0	
Pork	50.1	50.4	52.1	52.2	51.9	52.0	
Total red meat	107.0	109.0	112.6	114.4	114.1	112.2	
Broilers	89.8	91.0	91.8	91.6	92.4	92.2	
Total poultry	107.6	108.8	109.6	109.2	109.9	109.3	
Red meat & poultry	214.6	217.8	222.2	223.6	224.0	221.5	
Note: Totals may not add due to rounding.							

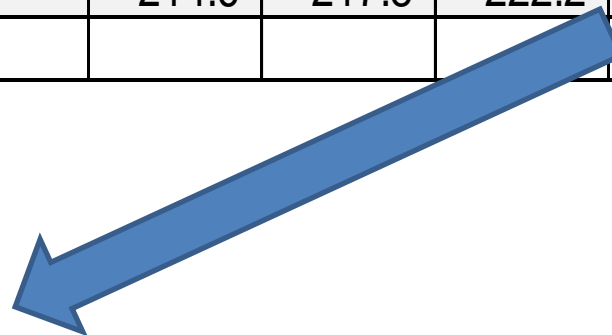
USDA Long-Term projections

Feb. 2018 report (<http://www.usda.gov/oce/commodity/projections/>)

2019 would be highest for beef since 2009

Per capita meat consumption, retail weight							
Item	2016	2017	2018	2019	2020	2027	
Beef	55.6	57.3	59.2	60.9	60.9	59.0	
Pork	50.1	50.4	52.1	52.2	51.9	52.0	
Total red meat	107.0	109.0	112.6	114.4	114.1	112.2	
Broilers	89.8	91.0	91.8	91.6	92.4	92.2	
Total poultry	107.6	108.8	109.6	109.2	109.9	109.3	
Red meat & poultry	214.6	217.8	222.2	223.6	224.0	221.5	
Note: Totals may not add due to rounding.							

Year	Total Red Meat & Poultry
1995	205.4
2000	214.4
2005	219.7
2010	207.5
2014	200.1



USDA Long-Term projections

Feb. 2018 report (<http://www.usda.gov/oce/commodity/projections/>)

Per capita meat consumption, retail weight							
Item	2016	2017	2018	2019	2020	2027	
Beef	55.6	57.3	59.2	60.9	60.9	59.0	
Pork	50.1	50.4	52.1	52.2	51.9	52.0	
Total red meat	107.0	109.0	112.6	114.4	114.1	112.2	
Broilers	89.8	91.0	91.8	91.6	92.4	92.2	
Total poultry	107.6	108.8	109.6	109.2	109.9	109.3	
Red meat & poultry	214.6	217.8	222.2	223.6	224.0	221.5	
Note: Totals may not add due to rounding.							

Projections INCLUDE trade dependency...

USDA Long-Term projections

Feb. 2018 report (<http://www.usda.gov/oce/commodity/projections/>)

Beef long-term projections

Item	Units	2016	2017	2018	2019	2020	2027
Commercial production	Mil. lbs.	25,221	26,400	27,620	28,312	28,644	29,097
Change from previous year	Percent		4.7%	4.6%	2.5%	1.2%	0.6%
Imports	Mil. lbs.	3,015	2,966	3,030	2,920	2,954	3,090
Total supply	Mil. lbs.	28,986	30,190	31,417	32,014	32,225	32,814
			4.2%	4.1%	1.9%	0.7%	0.5%
Exports	Mil. lbs.	2,556	2,855	2,970	2,752	2,734	2,976
			11.7%	4.0%	-7.3%	-0.7%	0.2%
Total consumption	Mil. lbs.	25,673	26,635	27,732	28,702	28,931	29,278
Per capita, retail weight	Pounds	55.6	57.3	59.2	60.9	60.9	59.0
Change from previous year	Percent		3.1%	3.3%	2.9%	0.0%	0.0%

Choice Beef Retail Demand Index

(Quarterly, Price-Index Approach, 1990=100)

Q1.2017: -3.1%
vs. Q1.2016

Q2.2017: -0.3%
vs. Q2.2016

Q3.2017: +0.8%
vs. Q3.2016

Q4.2017: +1.6%
vs. Q4.2016

Assessing Beef Demand Determinants (Jan. 18, 2018)

Glynn T. Tonsor, Jayson L. Lusk, and Ted C. Schroeder

Cattlemen's Beef Board



[https://www.beefboard.org/news/files/FY2018/
Assessing%20Beef%20Demand%20Determinants FullReport.pdf](https://www.beefboard.org/news/files/FY2018/Assessing%20Beef%20Demand%20Determinants%20FullReport.pdf)

Deeper Look at Data Quality

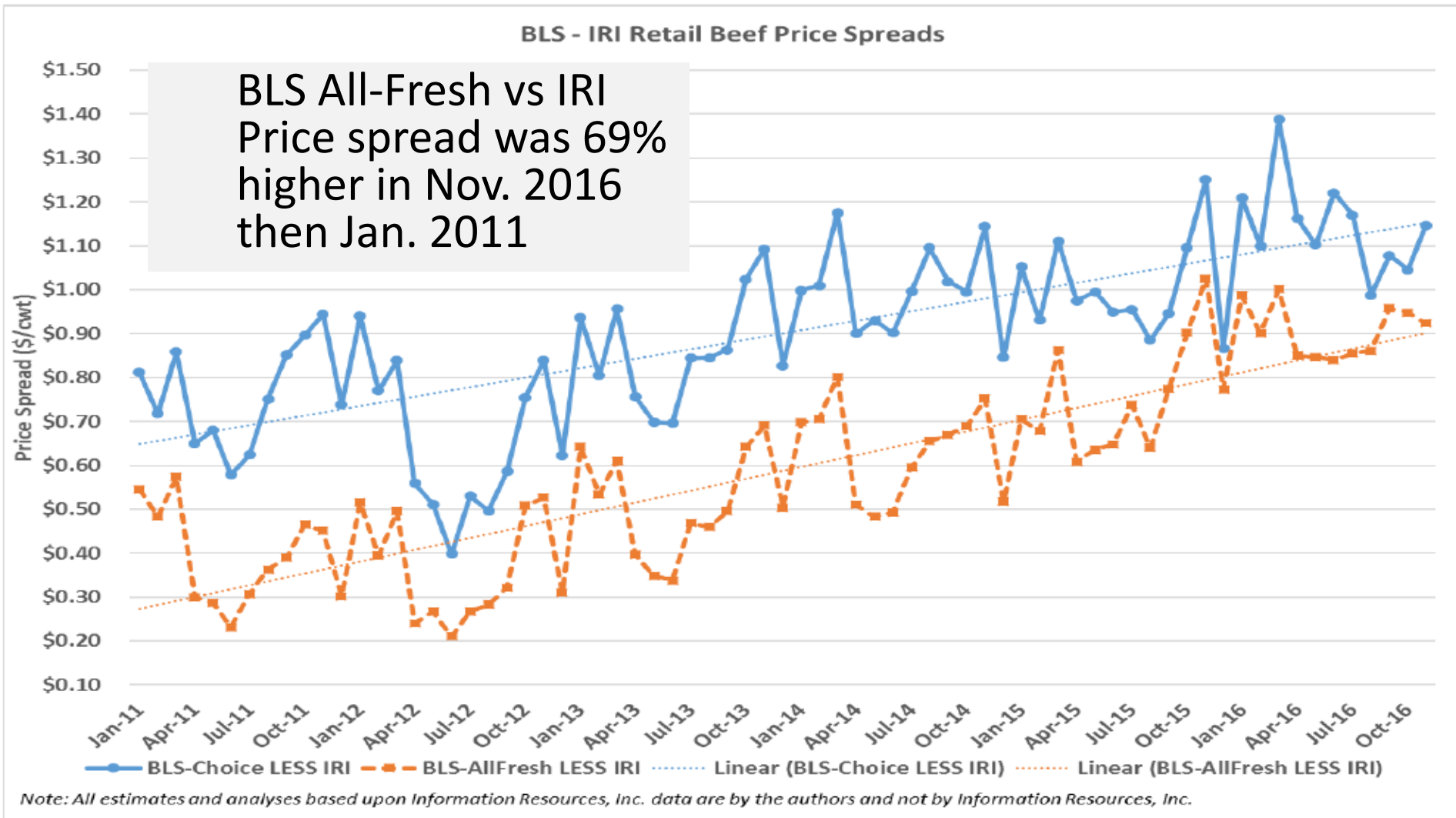
- Do you agree with:
 - “Public (e.g. BLS, USDA...) Data Accurately Reflects Industry Reality.”
 - “Public (e.g. BLS, USDA...) Data Reasonably Adjusts over Time Given Industry Changes.”

Deeper Look at Data Quality

- Consider example of retail meat prices
 - BLS/ERS monthly prices often used by analysts
 - <https://www.ers.usda.gov/data-products/meat-price-spreads/>
 - Grocery store posted, asking prices based
 - Changes in FAH/FAFH, product featuring, etc. over time...

Deeper Look at Data Quality

Figure 18. Comparison of Retail Price Series Spreads, Jan. 2011 – Nov. 2016



Deeper Look at Data Quality

Case of Simple-Average Retail Price

Year	Retail Price	Farm Price	Farmer's Share
1	\$ 8.00	\$ 2.00	25%
2	\$ 8.40	\$ 2.04	24%
3	\$ 8.82	\$ 2.08	24%
4	\$ 9.26	\$ 2.12	23%
5	\$ 9.72	\$ 2.16	22%
6	\$ 10.21	\$ 2.21	22%
7	\$ 10.72	\$ 2.25	21%
8	\$ 11.26	\$ 2.30	20%
9	\$ 11.82	\$ 2.34	20%
10	\$ 12.41	\$ 2.39	19%

Deeper Look at Data Quality

Case of Simple-Average Retail Price				Case of Volume-Adjusted Retail Price			
Year	Retail Price	Farm Price	Farmer's Share	Year	Retail Price	Farm Price	Farmer's Share
1	\$ 8.00	\$ 2.00	25%	1	\$ 8.00	\$ 2.00	25%
2	\$ 8.40	\$ 2.04	24%	2	\$ 8.32	\$ 2.04	25%
3	\$ 8.82	\$ 2.08	24%	3	\$ 8.64	\$ 2.08	24%
4	\$ 9.26	\$ 2.12	23%	4	\$ 8.98	\$ 2.12	24%
5	\$ 9.72	\$ 2.16	22%	5	\$ 9.34	\$ 2.16	23%
6	\$ 10.21	\$ 2.21	22%	6	\$ 9.70	\$ 2.21	23%
7	\$ 10.72	\$ 2.25	21%	7	\$ 10.08	\$ 2.25	22%
8	\$ 11.26	\$ 2.30	20%	8	\$ 10.47	\$ 2.30	22%
9	\$ 11.82	\$ 2.34	20%	9	\$ 10.87	\$ 2.34	22%
10	\$ 12.41	\$ 2.39	19%	10	\$ 11.29	\$ 2.39	21%

❑ Made-up Example of:

- Annual Prices: +5% Retail & +2% Farm
 - Mimics post-farm gate, demand-oriented investments
- Annual 1% Growth in Simple-Average Bias

Wrap-Up

- Broad 2018-2019 Profitability Outlook
 - Cow-calf:
 - Converging toward Long-Term Levels
 - 2017 Better than Expected, Hope Demand's Role is Recognized!
 - Stocker:
 - Margins vary widely across situations
 - Growing drought/feasibility impact
 - Feedlot:
 - 2017 offered notable equity recovery
 - 2018 has improved given demand strength
 - Challenges may grow during 2018-2019 (weights, demand, & trade...)

Wrap-Up

- Data Quality
 - Look Deeper
 - Simple Averages Mask Important Variation
 - Data Collection Needs to Remain Reasonably Current
 - More Public-Private Data/Info Efforts Needed (GT opinion)

More information available at:



This presentation will be available in PDF format at:

<http://www.agmanager.info/about/contributors/individual/tonsor.asp>

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