

Industry Outlook Conf.
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Beef Industry Outlook



This presentation will be available in PDF format at:

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

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Overarching Beef Industry Economic Outlook

- Supplies
 - Beef Production Up
 - +6.4% in 2016, +3.8% in 2017, +5.0% in 2018, +1.6% in 2019
- Demand
 - Key to surprising prices in 2017
 - Q4: Production +2%; Fed Prices +9% & Calf Prices +23%
 - Exports remain key & growing arena of uncertainty
 - >\$250/hd value since 2014 (USMEF)

Choice Beef Retail Demand Index

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

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

Q1.2018: -1.7%
vs. Q1.2017

<http://agmanager.info/livestock-meat/meat-demand>

How Does Domestic Demand Impact Me?

- 1% increase in domestic demand =
 - +2.30% live cattle & +3.50% feeder prices (McKendree et al., 2018)
- Q4.2017 Domestic Demand Index +2% (vs. Q4.2016)
 - Realized Prices:
 - \$118 (live) & \$157 (feeder)
 - Without domestic demand increase, would have been:
 - \$112.57 (live) & \$146.02 (feeder)
 - \$5.43/cwt & \$10.98/cwt price impacts

Assessing Beef Demand Determinants (Jan. 18, 2018)

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

Cattlemen's Beef Board



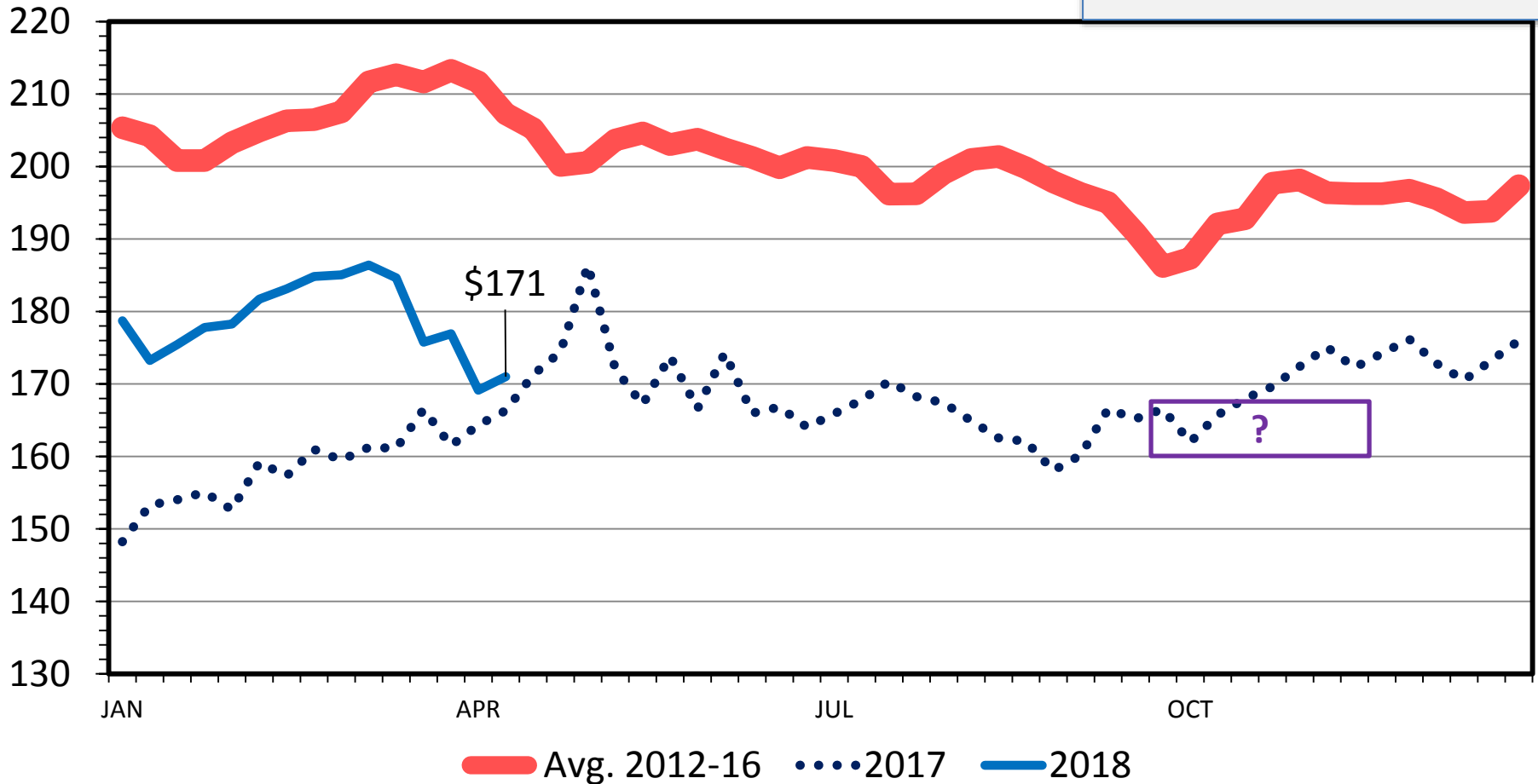
[https://www.beefboard.org/news/files/FY2018/
Assessing%20Beef%20Demand%20Determinants FullReport.pdf](https://www.beefboard.org/news/files/FY2018/Assessing%20Beef%20Demand%20Determinants%20FullReport.pdf)

**BeefBasis.com, Salina,
KS 2018 Projections
(as of 4/24/18):
Oct. 17: \$167**

MED. & LRG. #1 STEER CALF PRICES

500-600 Pounds, Southern Plains, Weekly

\$ Per Cwt.



Data Source: USDA-AMS

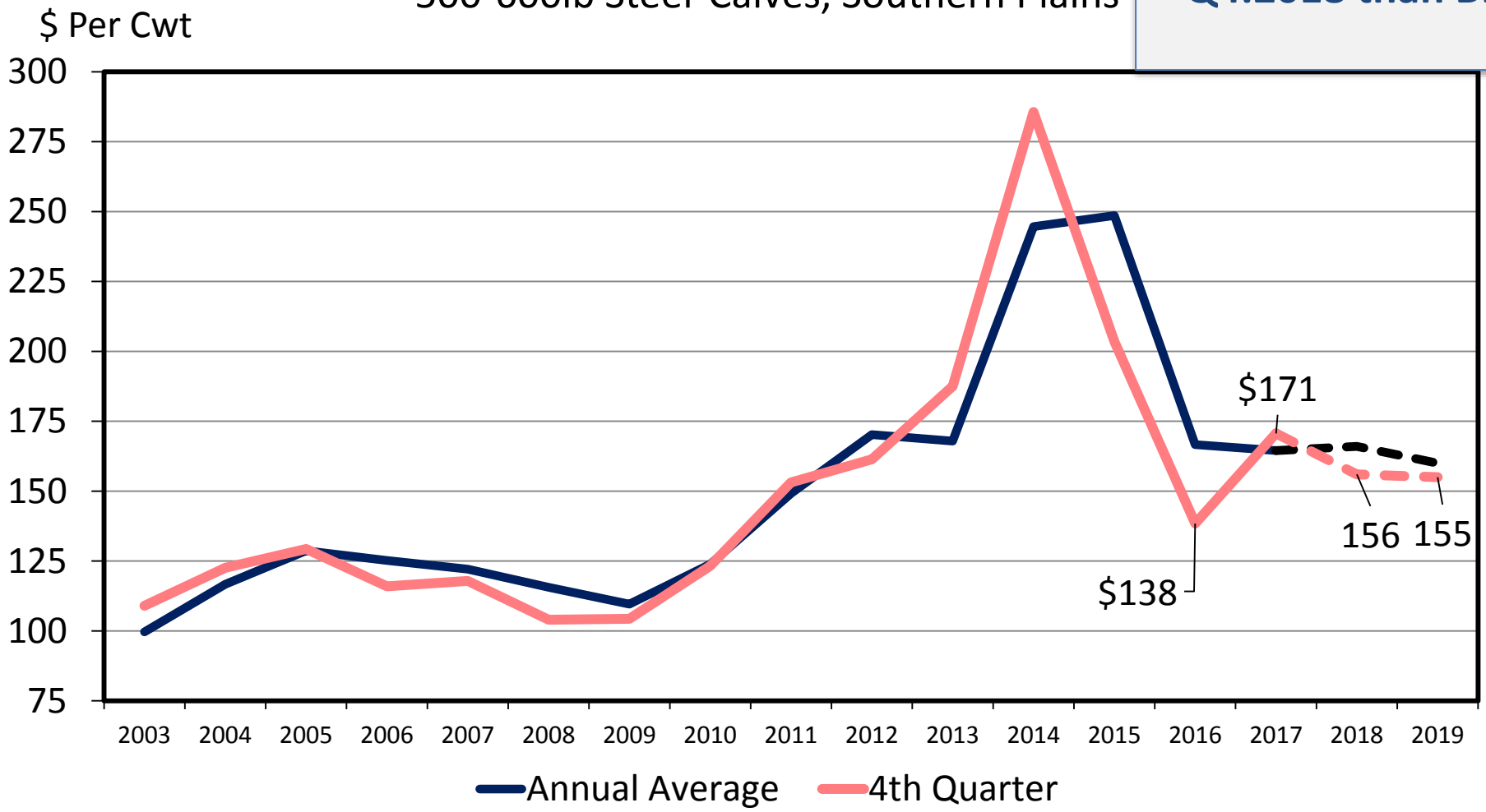
Livestock Marketing Information Center

C-P-54
04/18/18

LMIC Projections
~\$10/cwt lower for
Q4.2018 than BB

AVERAGE CALF PRICES

500-600lb Steer Calves, Southern Plains

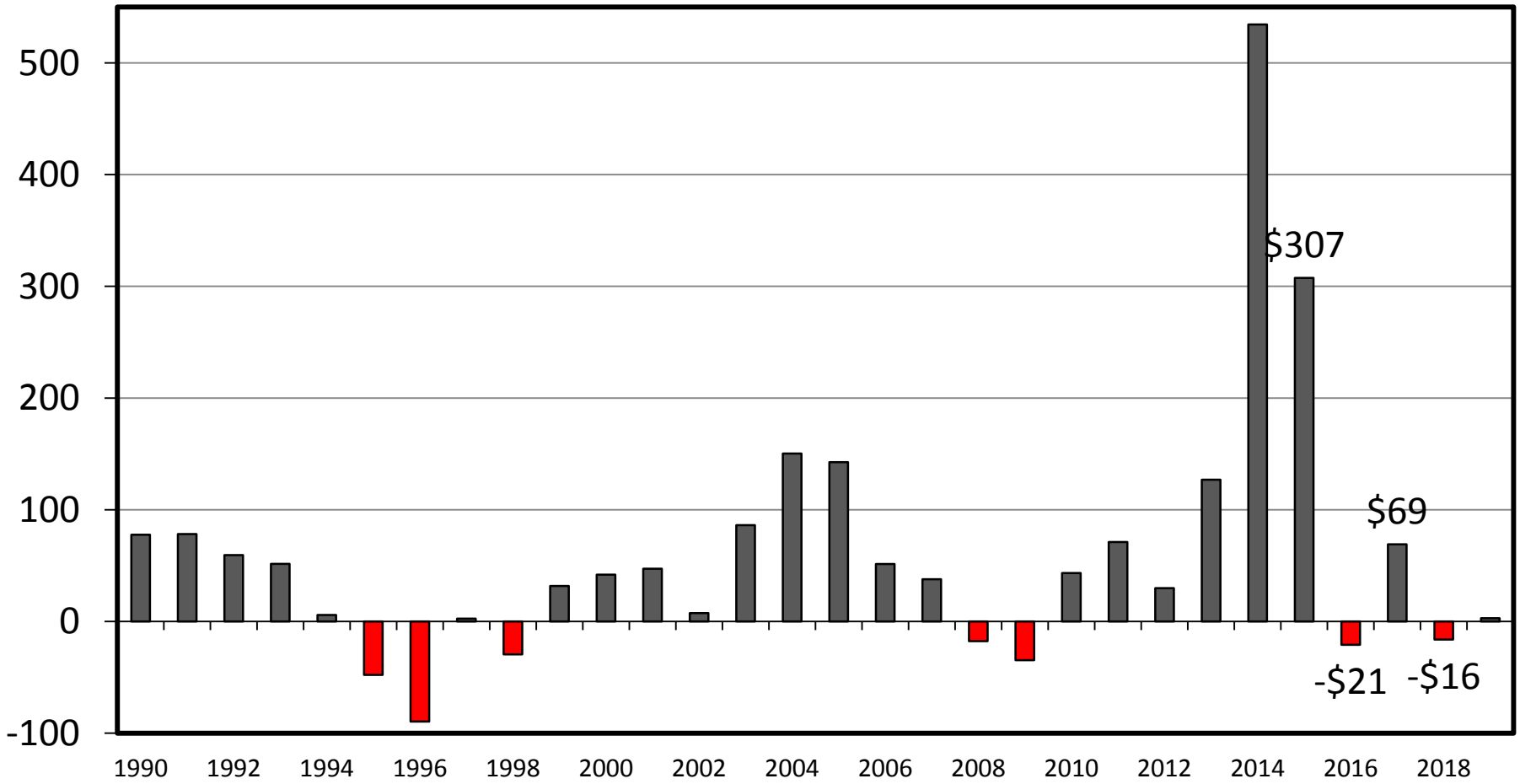


Data Source: USDA-AMS, Compiled and Forecasts by LMIC
Livestock Marketing Information Center

ESTIMATED AVERAGE COW CALF RETURNS

Returns Over Cash Cost (Includes Pasture Rent), Annual

\$ Per Cow



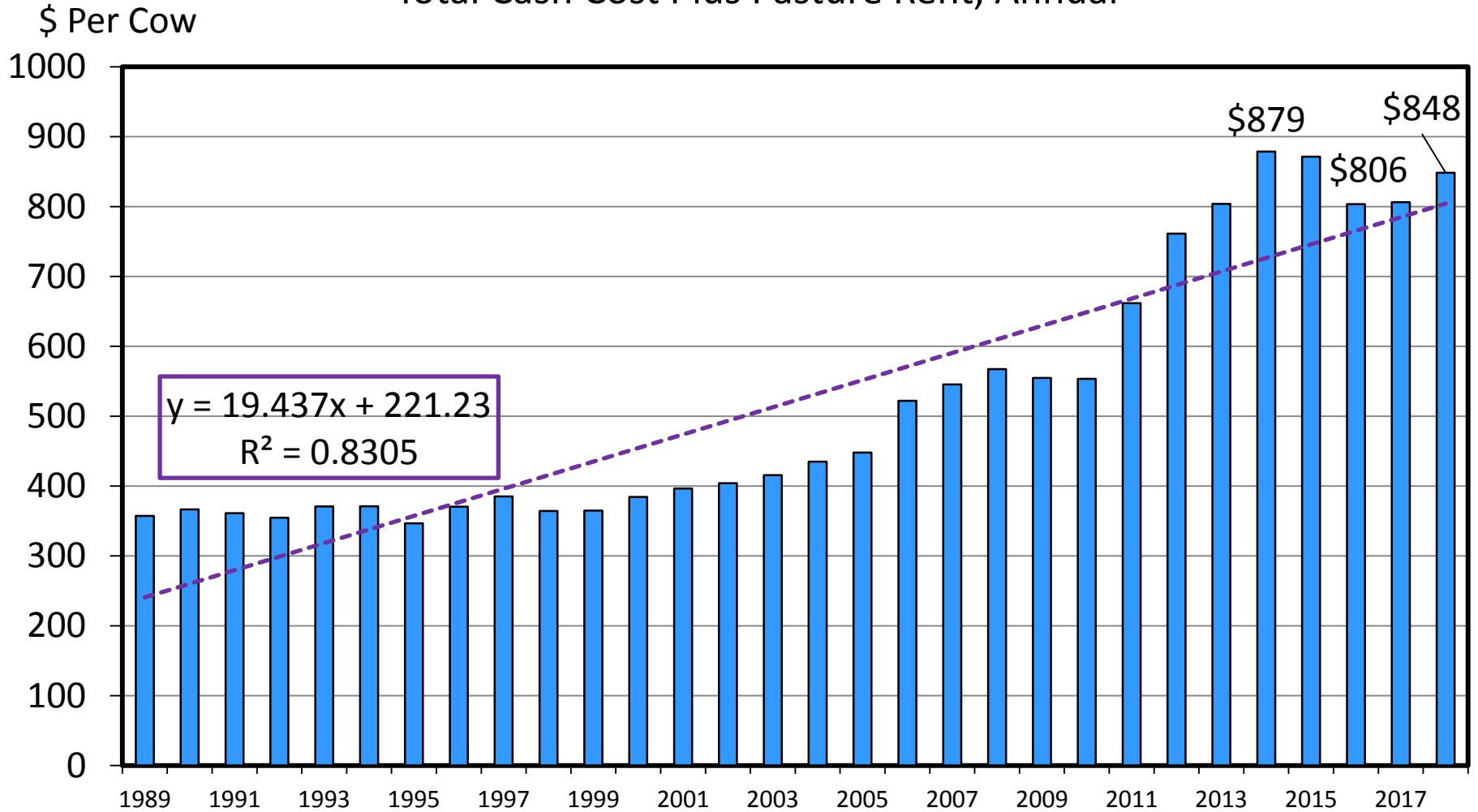
Data Source: USDA & LMIC, Compiled by LMIC

Livestock Marketing Information Center

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03/30/18

ESTIMATED AVERAGE COW CALF COSTS

Total Cash Cost Plus Pasture Rent, Annual

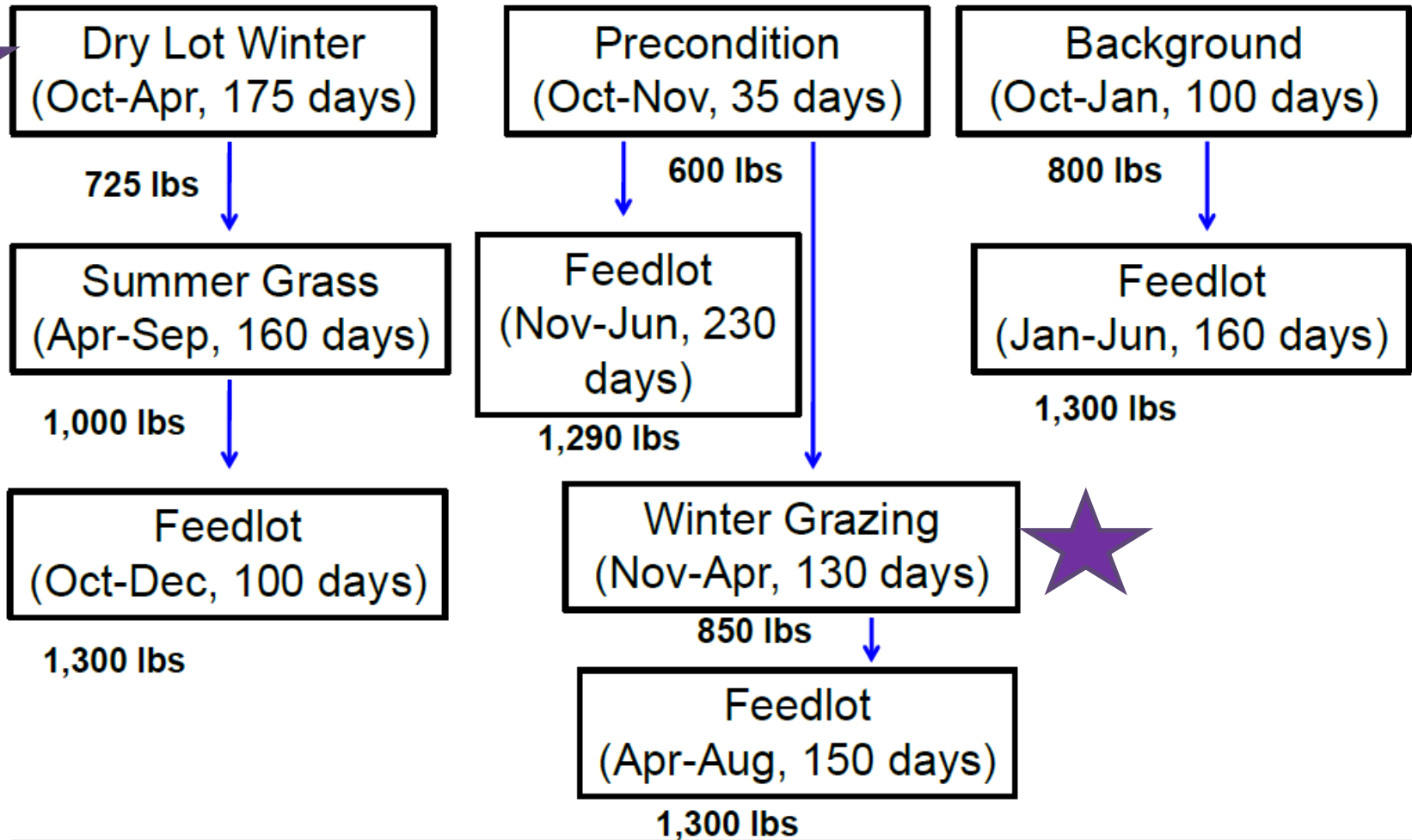


Data Source: USDA & LMIC, Compiled by LMIC

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03/30/18

Fall Weaned 550# Calf



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

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

- Salina, KS 4/24/18 Dry-Lot Wintering situation:
 - Buy/Retain 550 lb steer on 10/17/18 (\$168)
 - Sell 750 lb steer on 4/17/19 (\$144) {1.1 ADG}
 - VOG: \$78/cwt
 - *Drought Monitor may have a say in COG...*

Economic Outlook Overview: Feedlots

- 2017 MUCH better than anticipated
- 2018 projections continue to erode

Historical and Projected Kansas Feedlot Net Returns (as of 4/12/18')

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

Feb. 18': +\$101/steer

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

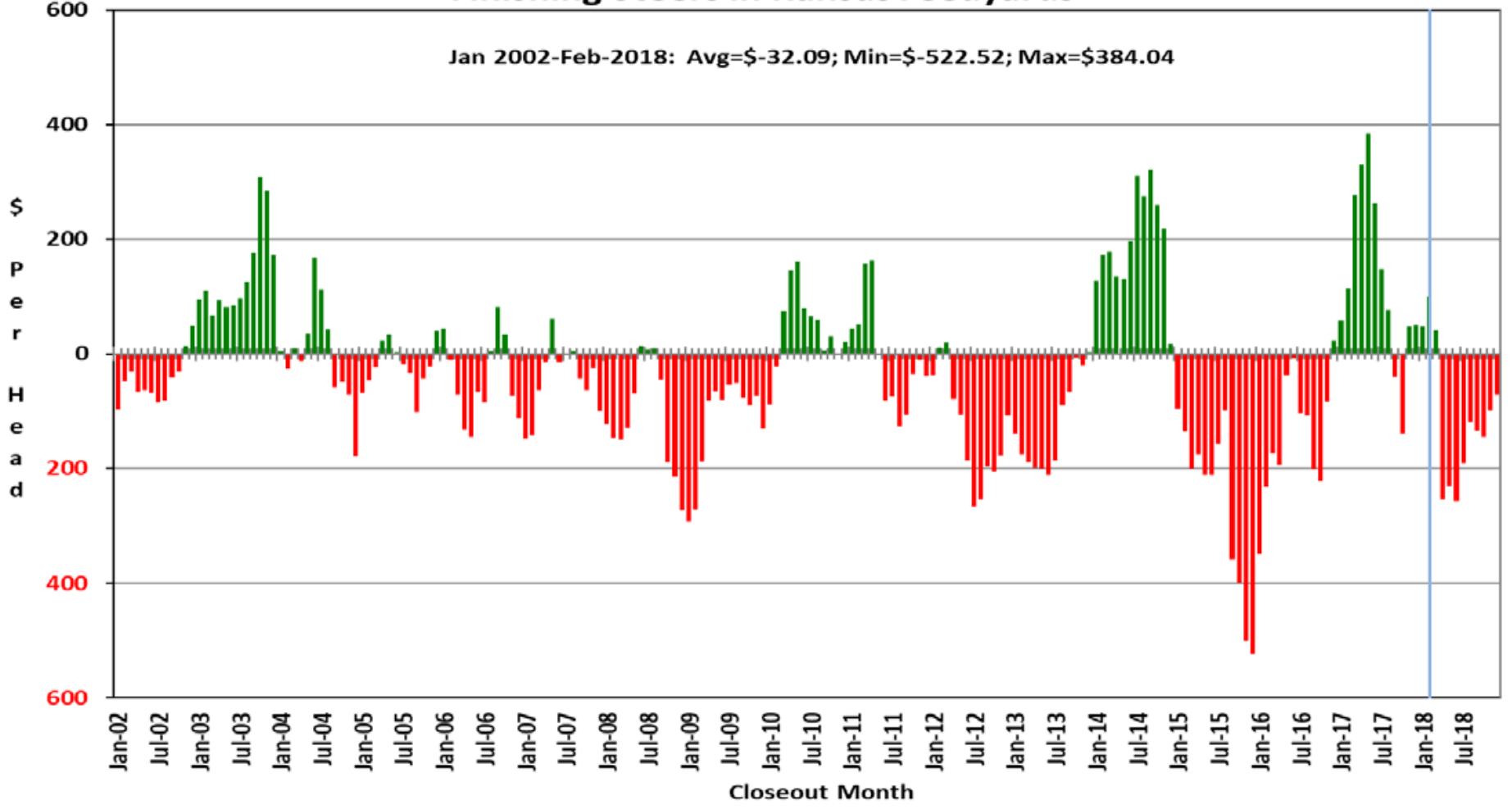
Closeout Mo-Yr	Net Return	FCOG**	Fed Price	Fed Futures	Fed Basis	Feeder Price	Breakeven FCOG**	Breakeven Fed Price	Breakeven Feeder Price
Mar-18	41.54	79.85	125.10	120.05	5.06	153.70	86.55	122.09	159.16
Apr-18	-253.77	80.90	106.53	103.70	2.83	157.83	37.61	125.57	123.85
May-18	-230.14	85.97	111.45	103.70	7.75	158.61	46.74	128.64	128.02
Jun-18	-256.67	84.83	107.93	104.28	3.65	157.25	40.18	127.38	122.79
Jul-18	-191.13	84.42	106.59	104.28	2.31	147.31	53.05	120.67	121.76
Aug-18	-118.93	84.15	110.11	108.53	1.58	146.38	65.46	118.82	130.06
Sep-18	-134.09	86.26	108.98	108.53	0.45	143.30	65.18	118.64	125.46
Oct-18	-143.94	87.15	113.26	112.55	0.71	146.17	61.89	123.55	128.80
Nov-18	-98.28	87.25	113.52	112.55	0.97	146.51	72.30	120.46	133.55
Dec-18	-70.95	88.52	116.51	114.30	2.21	147.40	77.61	121.57	137.96

Representative Barometer for Trends in Profitability

Historical and Projected Kansas Feedlot Net Returns (as of 4/12/18')

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

Figure 1. Historical & Projected Average Net Returns for Finishing Steers in Kansas Feedyards



Quarterly Forecasts (LMIC: 4/22/18)

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	7,714	7.4	817.0	-1.1	6,303	6.2
II	8,076	5.8	793.3	-2.2	6,407	3.5
III	8,254	5.2	816.0	-1.1	6,736	4.1
IV	8,145	2.9	827.8	-1.1	6,742	1.8
Year	32,189	5.3	813.5	-1.4	26,187	3.8
2018						
I	7,877	2.1	820.8	0.5	6,465	2.6
II	8,432	4.4	813.7	2.6	6,861	7.1
III	8,585	4.0	833.2	2.1	7,153	6.2
IV	8,368	2.7	838.5	1.3	7,017	4.1
Year	33,262	3.3	826.7	1.6	27,496	5.0
2019						
I	7,848	-0.4	826.2	0.7	6,484	0.3
II	8,510	0.9	819.0	0.6	6,970	1.6
III	8,782	2.3	838.8	0.7	7,366	3.0
IV	8,433	0.8	842.9	0.5	7,109	1.3
Year	33,573	0.9	831.9	0.6	27,929	1.6



Quarterly Forecasts (LMIC: 4/22/18)

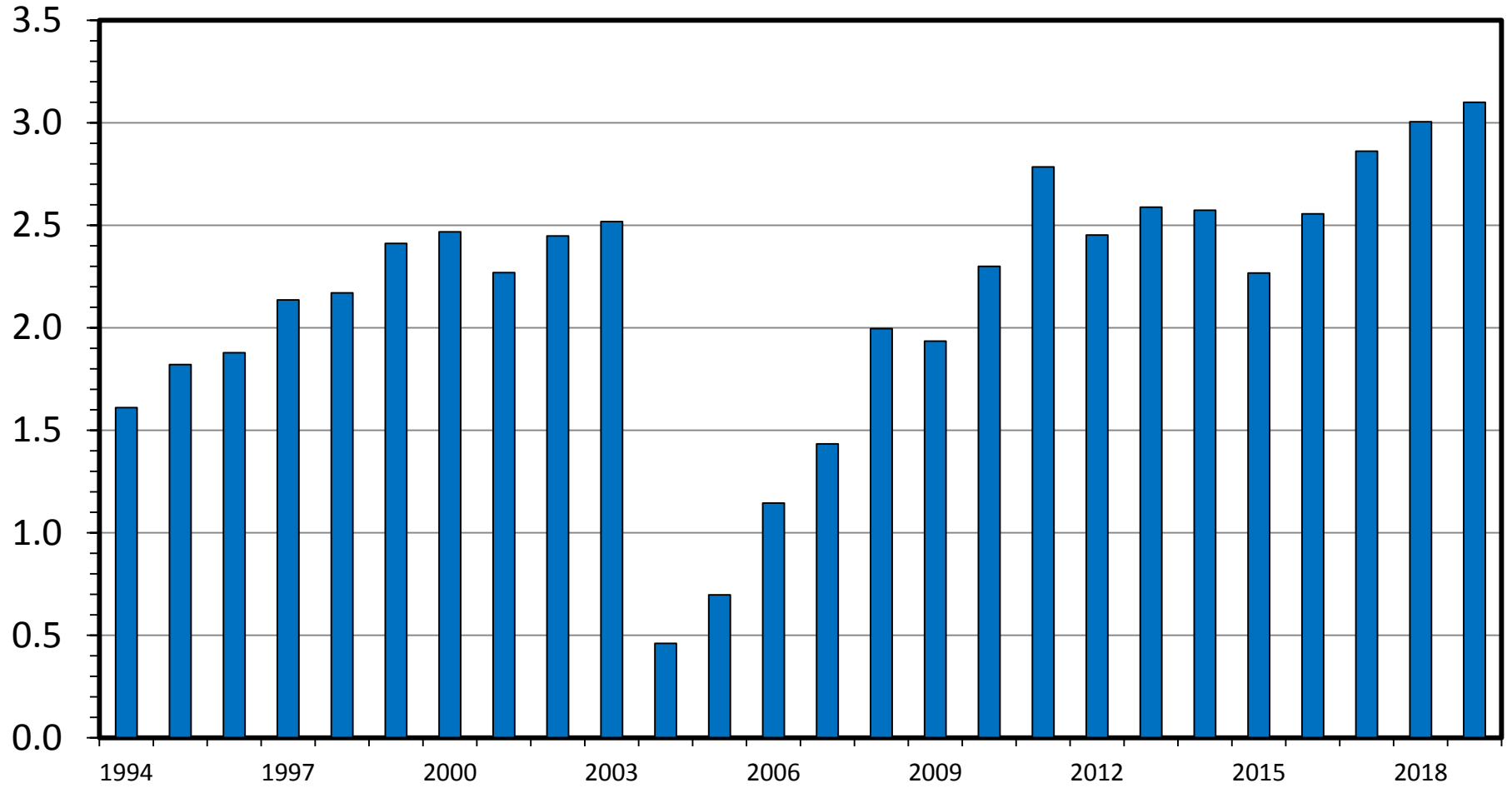
	Live Sltr.	% Chg.	Feeder Steer Price	
Year	Steer Price	from	Southern Plains	
Quarter	5-Mkt Avg	Year Ago	7-800#	5-600#
2017				
I	122.96	-8.8	132.88	157.38
II	132.76	4.0	149.30	170.49
III	112	-0.6	153	165
IV	118	9.1	157	171
Year	122	0.5	148	166
2018				
I	125.61	2.1	148.73	180.01
II	115-118	-12.2	136-139	165-168
III	104-108	-5.7	135-140	160-165
IV	110-115	-4.6	137-142	153-159
Year	114-116	-5.4	139-143	164-168
2019				
I	118-124	-3.7	138-143	158-165
II	115-122	1.7	137-144	160-168
III	104-112	1.9	133-141	155-164
IV	107-116	-0.9	133-142	150-160
Year	113-117	0.0	136-142	156-164

Trade

US BEEF AND VEAL EXPORTS

Carcass Weight, Annual

Bil. Pounds



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

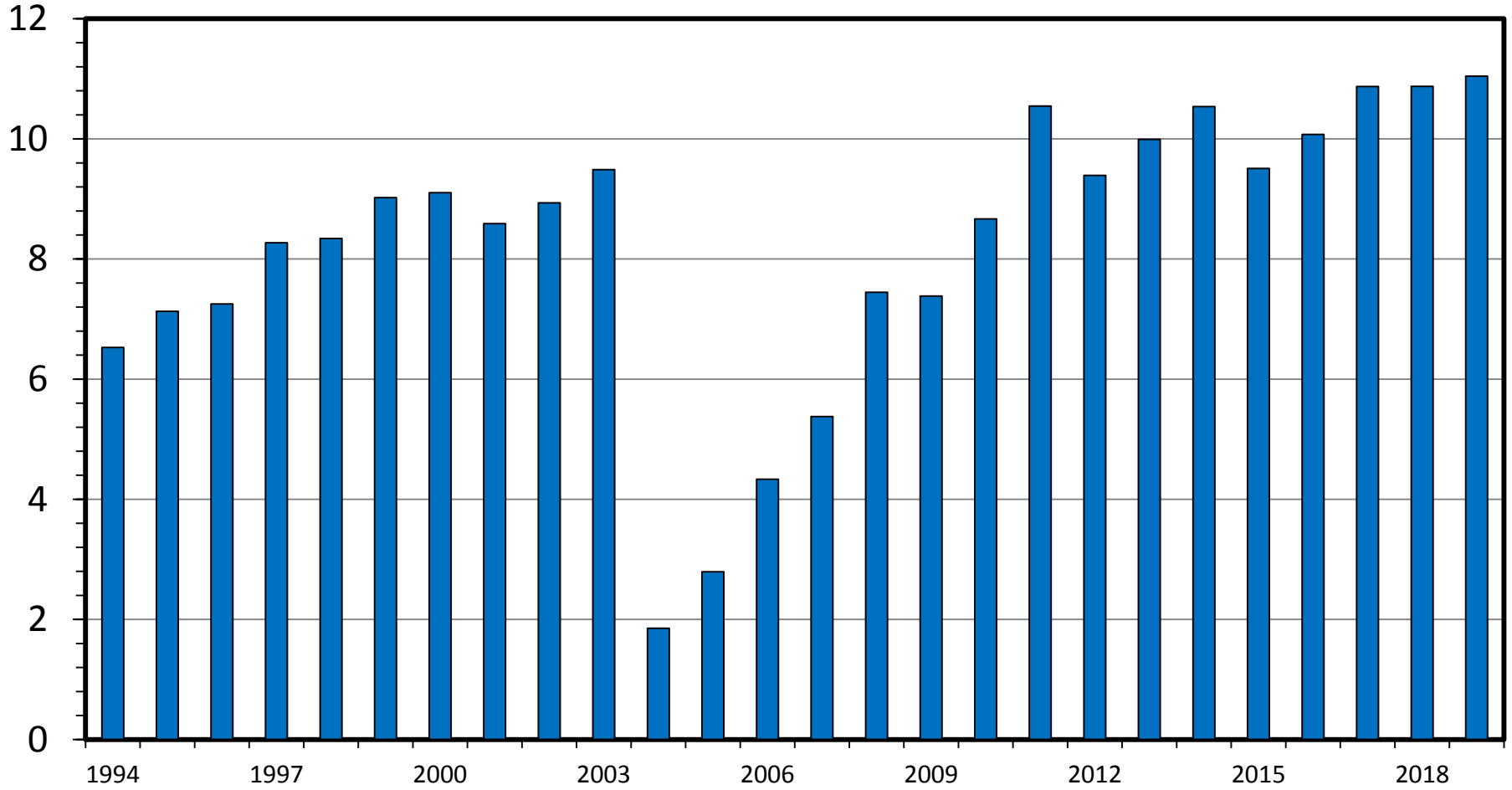
Livestock Marketing Information Center

I-N-06
04/12/18

US BEEF AND VEAL EXPORTS

As a Percentage of Production, Carcass Weight, Annual

Percent



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

Livestock Marketing Information Center

I-N-07
04/12/18

How Does Export Demand Impact Me?

- 1% increase in export demand =
 - +0.10% live cattle
 - +0.15% feeder cattle prices (McKendree et al., 2018)
- Q4.2017 Export Demand Index +9% (vs. Q4.2016)
 - Realized Prices:
 - \$118 (live) & \$157 (feeder)
 - Without export demand increase, would have been:
 - \$116.94 (live) & \$154.85 (feeder)
 - \$1.06/cwt & \$2.15/cwt price impacts
 - **GT:** Likely under-estimates recent price impacts

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

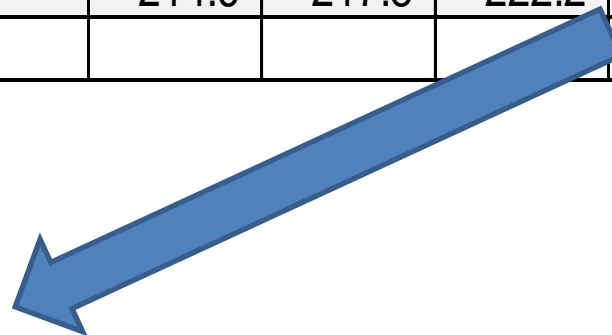
Feb. 2018 report (<http://www.usda.gov/oce/commodity/projections/>)

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

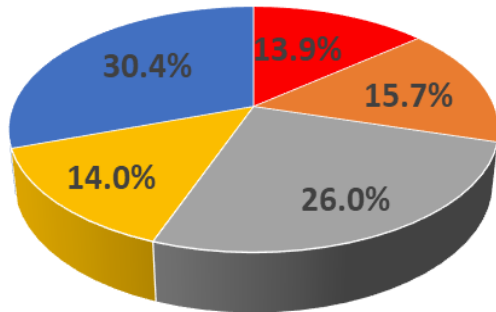
Feb. 2018 report (<http://www.usda.gov/oce/commodity/projections/>)

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...

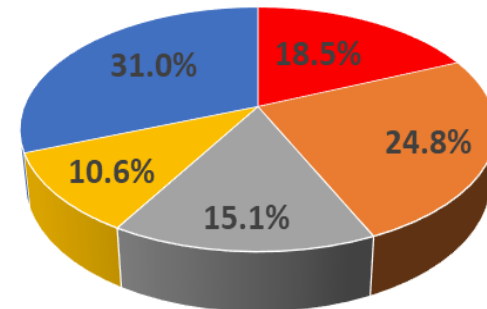
U.S. Beef Export Portfolio (by vol.)

U.S. Beef Export Portfolio, Average Annual Shares: 2013-2017



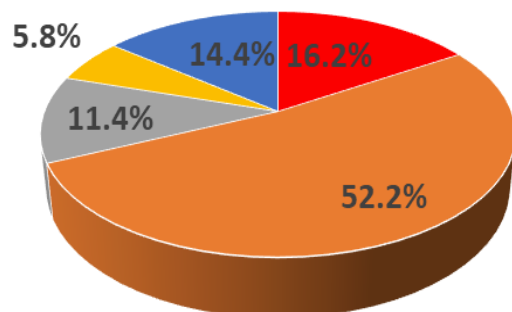
■ Canada ■ Mexico ■ Japan ■ South Korea ■ Other

U.S. Beef Export Portfolio, Average Annual Shares: 2008-2012



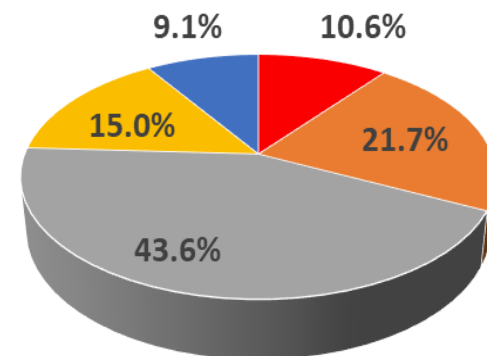
■ Canada ■ Mexico ■ Japan ■ South Korea ■ Other

U.S. Beef Export Portfolio, Average Annual Shares: 2003-2007



■ Canada ■ Mexico ■ Japan ■ South Korea ■ Other

U.S. Beef Export Portfolio, Average Annual Shares: 1998-2002



■ Canada ■ Mexico ■ Japan ■ South Korea ■ Other

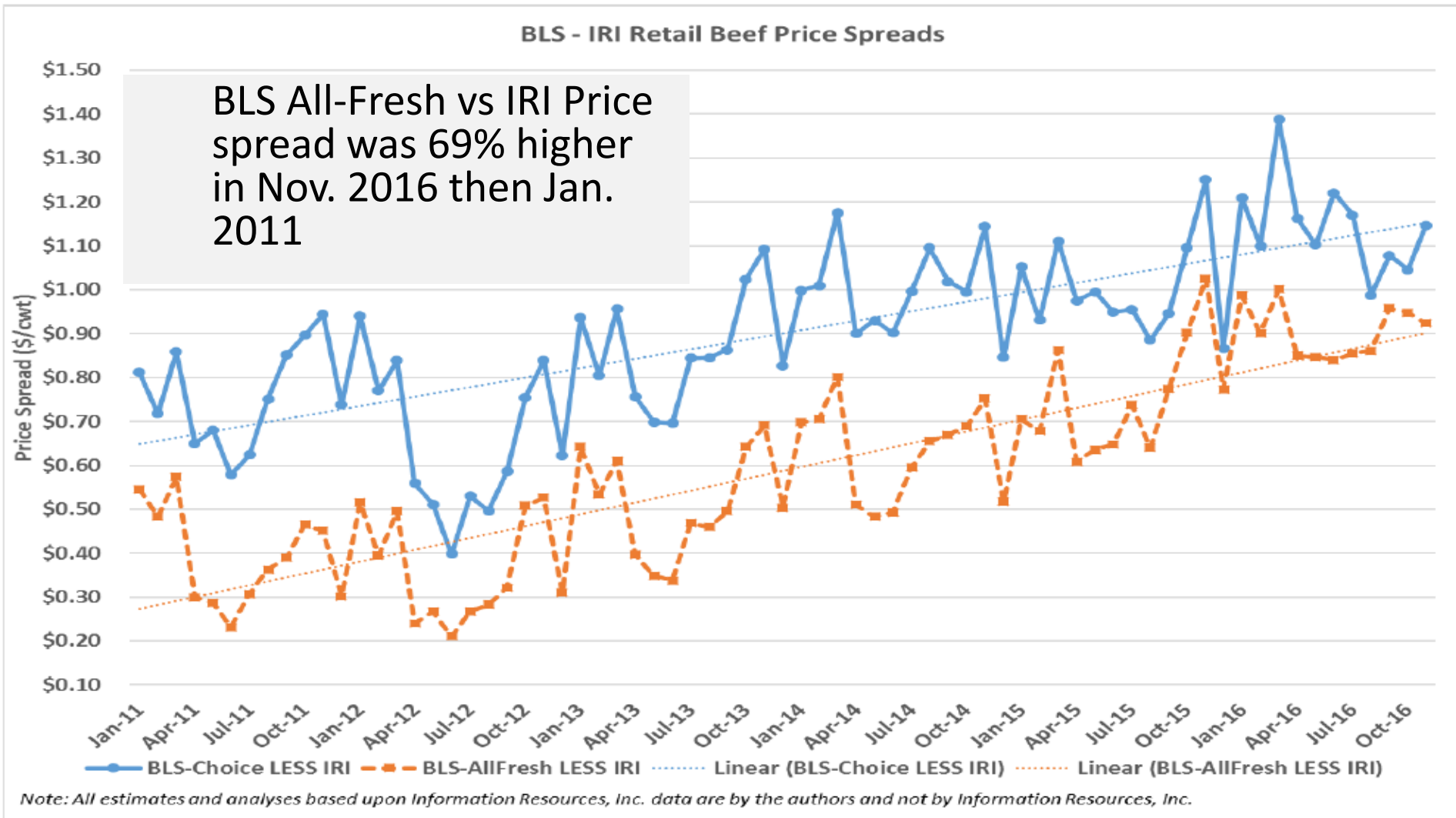
Data Quality

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

Year	Retail Price	Farm Price	Farmer's Share
1	\$ 8.00	\$ 2.00	25%
			24%
			24%
			23%
			22%
			22%
			21%
			20%
9	\$ 11.82	\$ 2.34	20%
10	\$ 12.41	\$ 2.39	19%

Point #1: PLEASE Do Not Misuse Farmer's Share #!

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

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%

Point #2: Farmer's Share # Biased Downward

Data Quality Wrap-Up

- Look Deeper
 - Simple Averages Mask Important Variation
- Data Collection Needs to Remain Reasonably Current
 - Asking Price vs. Actual Transaction Price
 - Will retailers feature more meat to keep foot traffic???
- 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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