

Discussion on how the trade war will affect U.S. agricultural markets in the short & long term

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Overview

- Duties
- Price and margin Impacts
 - Futures
 - Economic model
- How long will duties last?
 - Futures based
 - Observations from travel
- Take away's from the AAEA meeting organized session
- Allocation of twelve billion
- Impact on US competitiveness in the long run
- End on a positive note

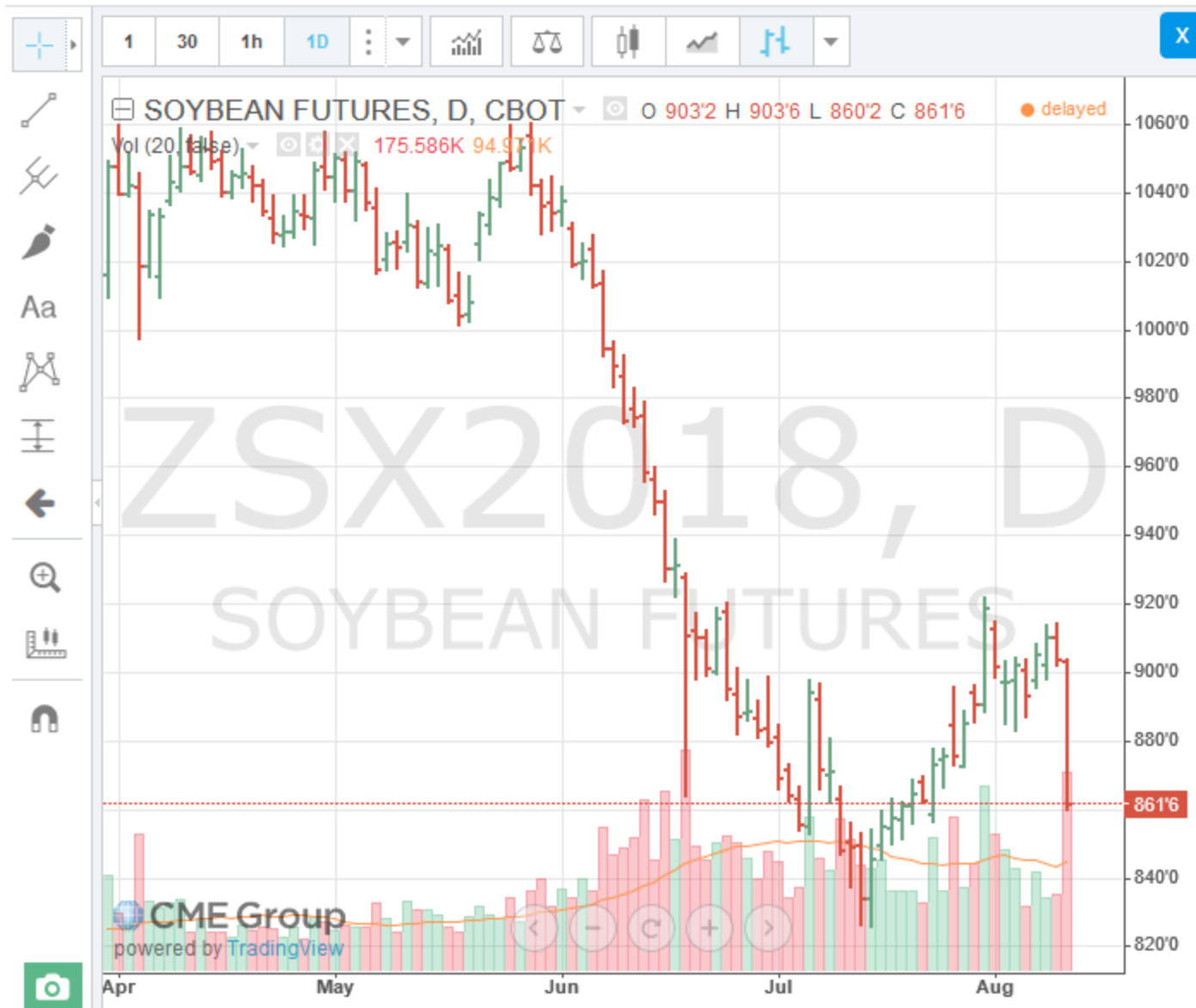
Retaliatory duties

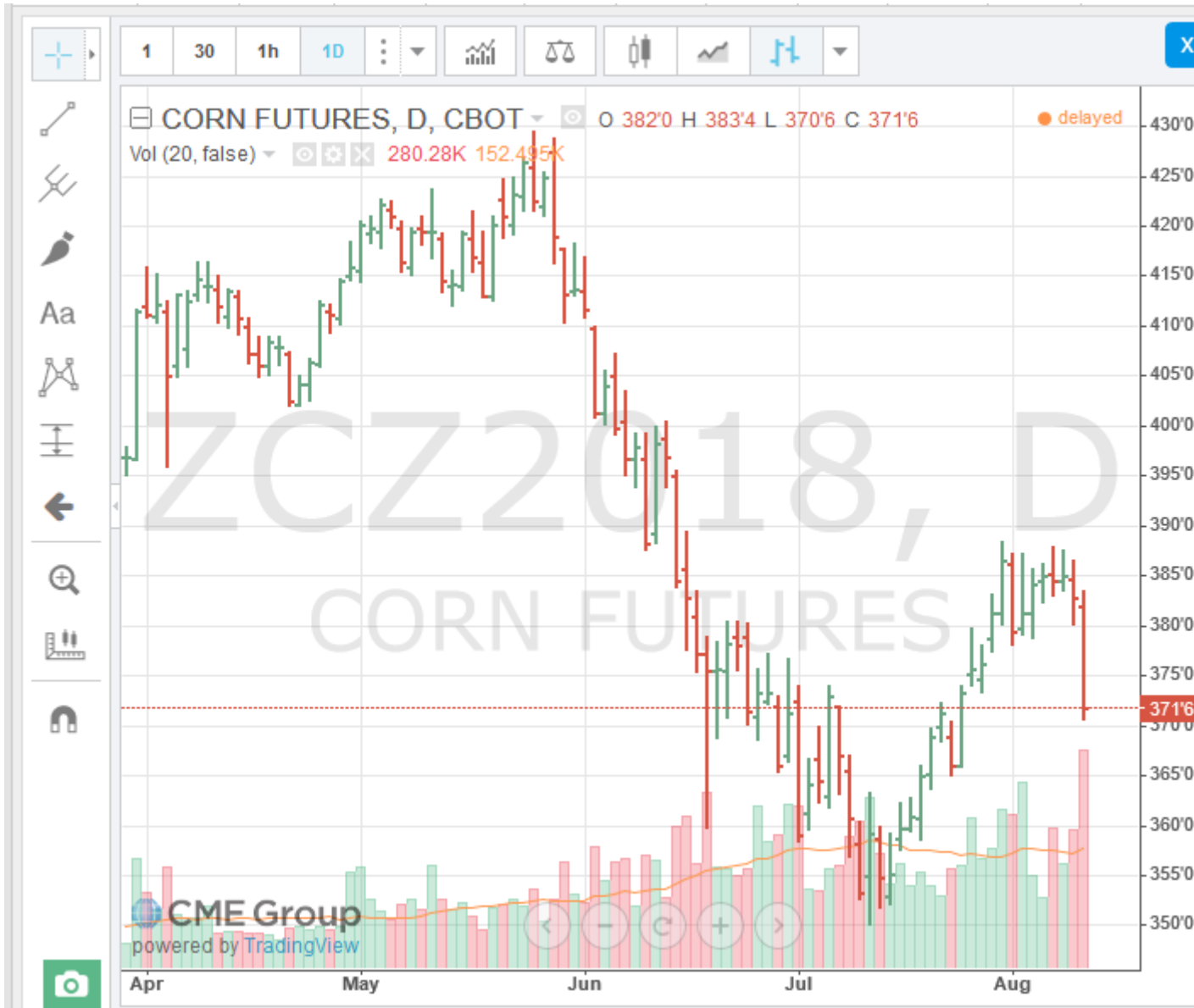
China

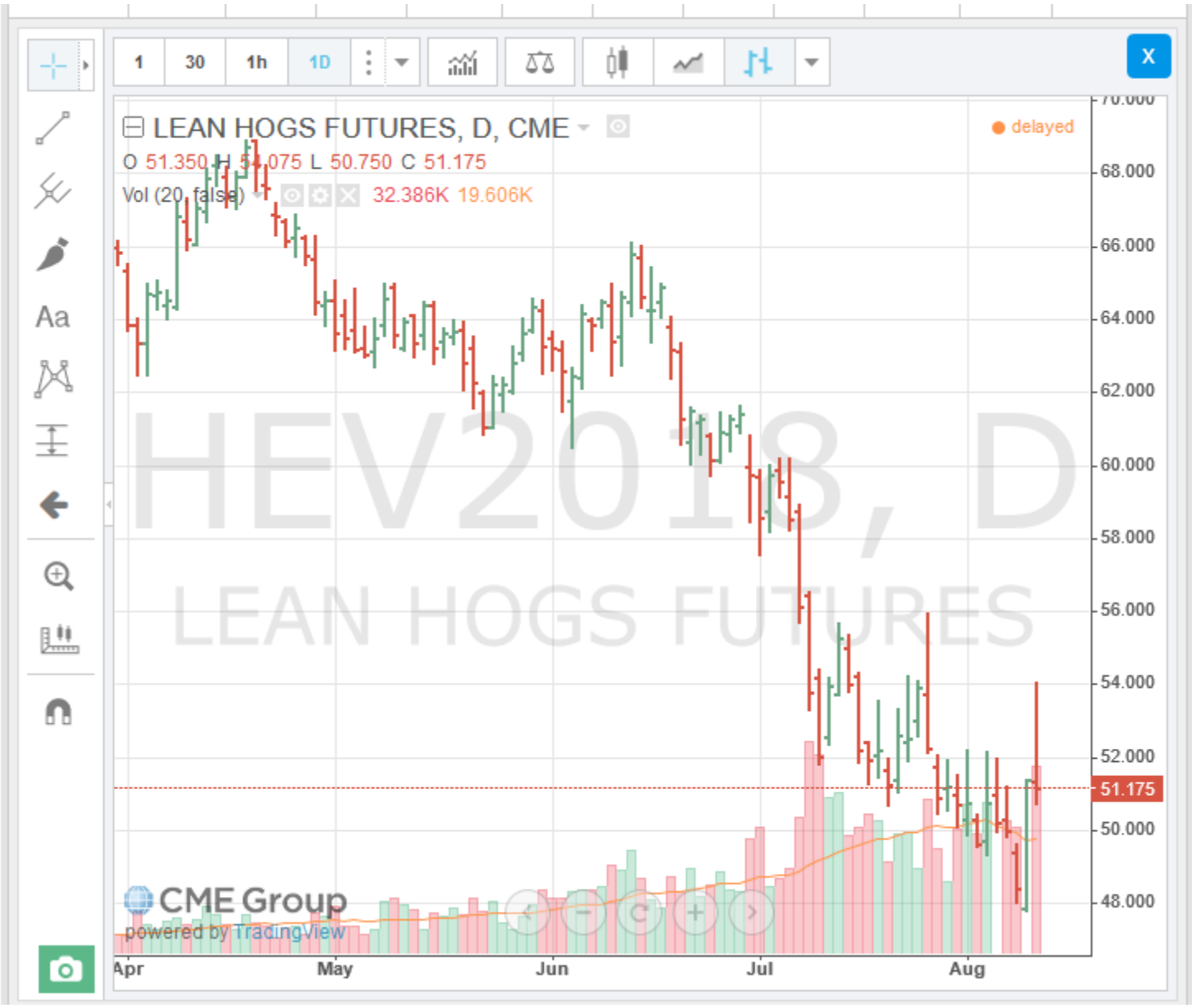
	Number of items affected	Tariff increase	New tariff	VAT
Pork (including offal)	11	25%-50%	12%-70%	10%
Beef (including offal)	7	25%	12%-50%	10%
Chicken (including offal)	25	25%	20%-45%	10%
Dairy	21	25%	12%-45%	10%
Soybeans	2	25%	28%	10%
Wheat	2	25%	90%	10%
Corn	1	25%	90%	10%
DDGS	1	25%	50%	0%
Ethanol	1	40%	70%	16%

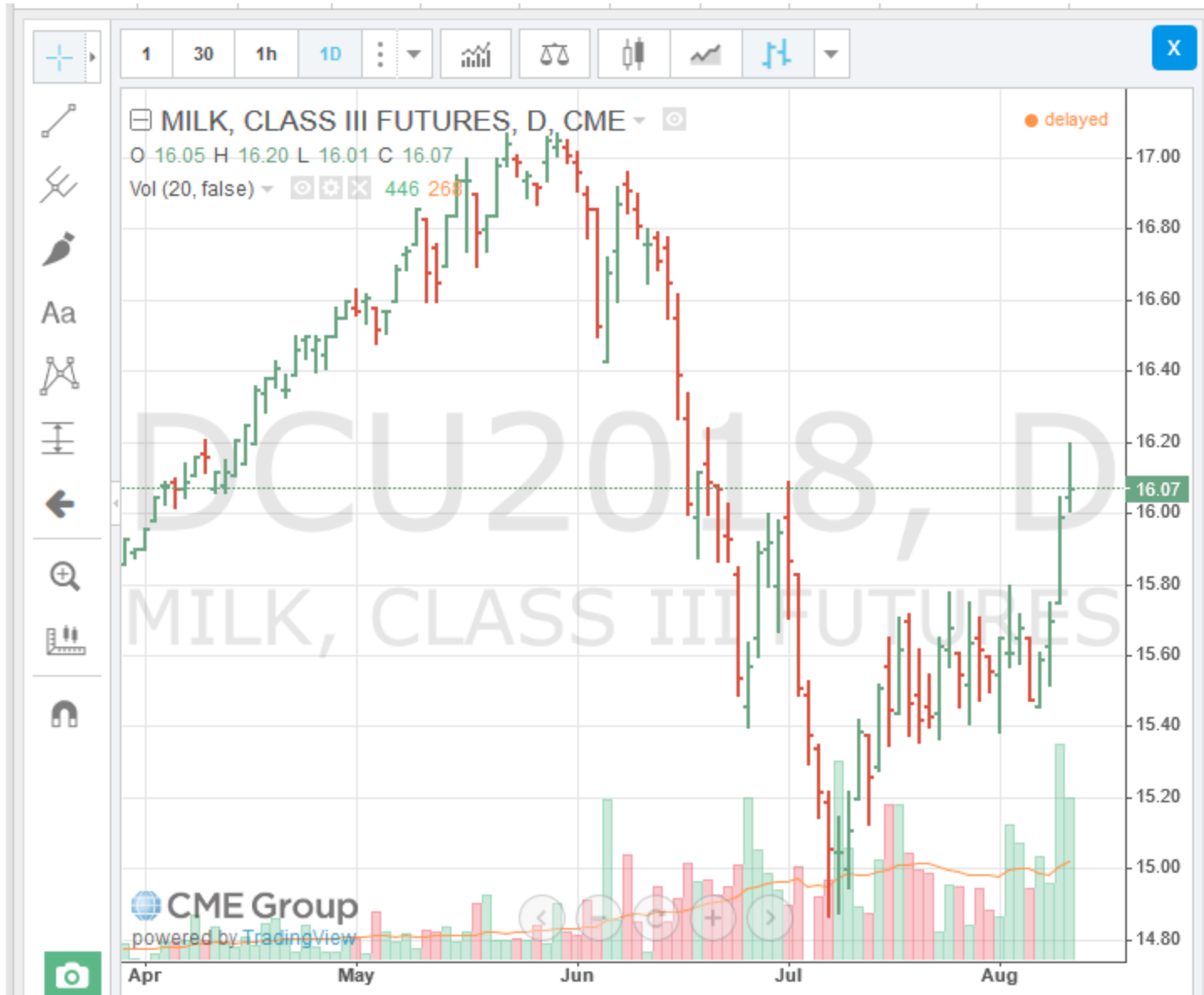
Mexico

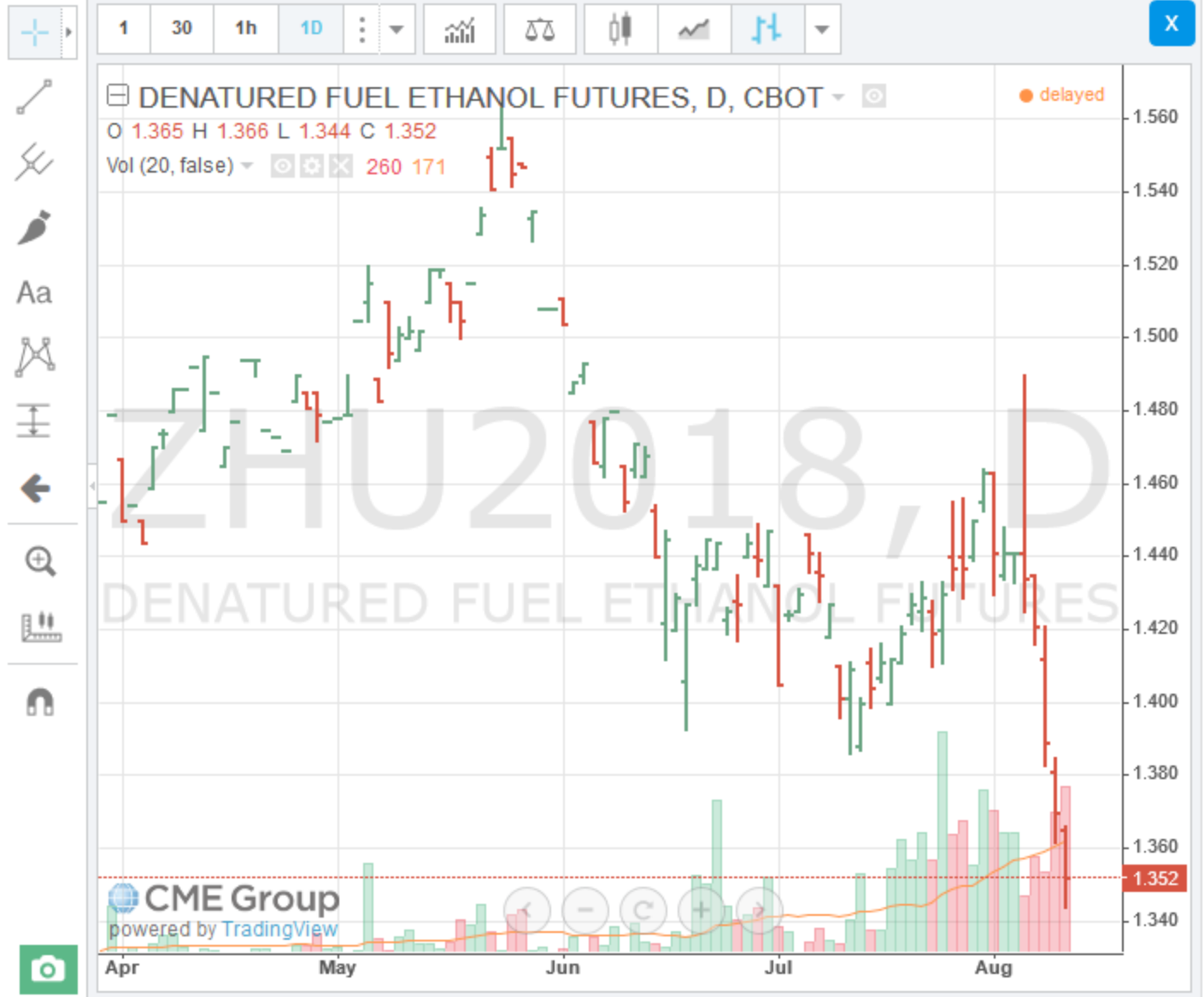
	Number of items affected	Tariff increase	New tariff
Pork	4	20%	20%
Dairy	4	20%~25%	20%~25%



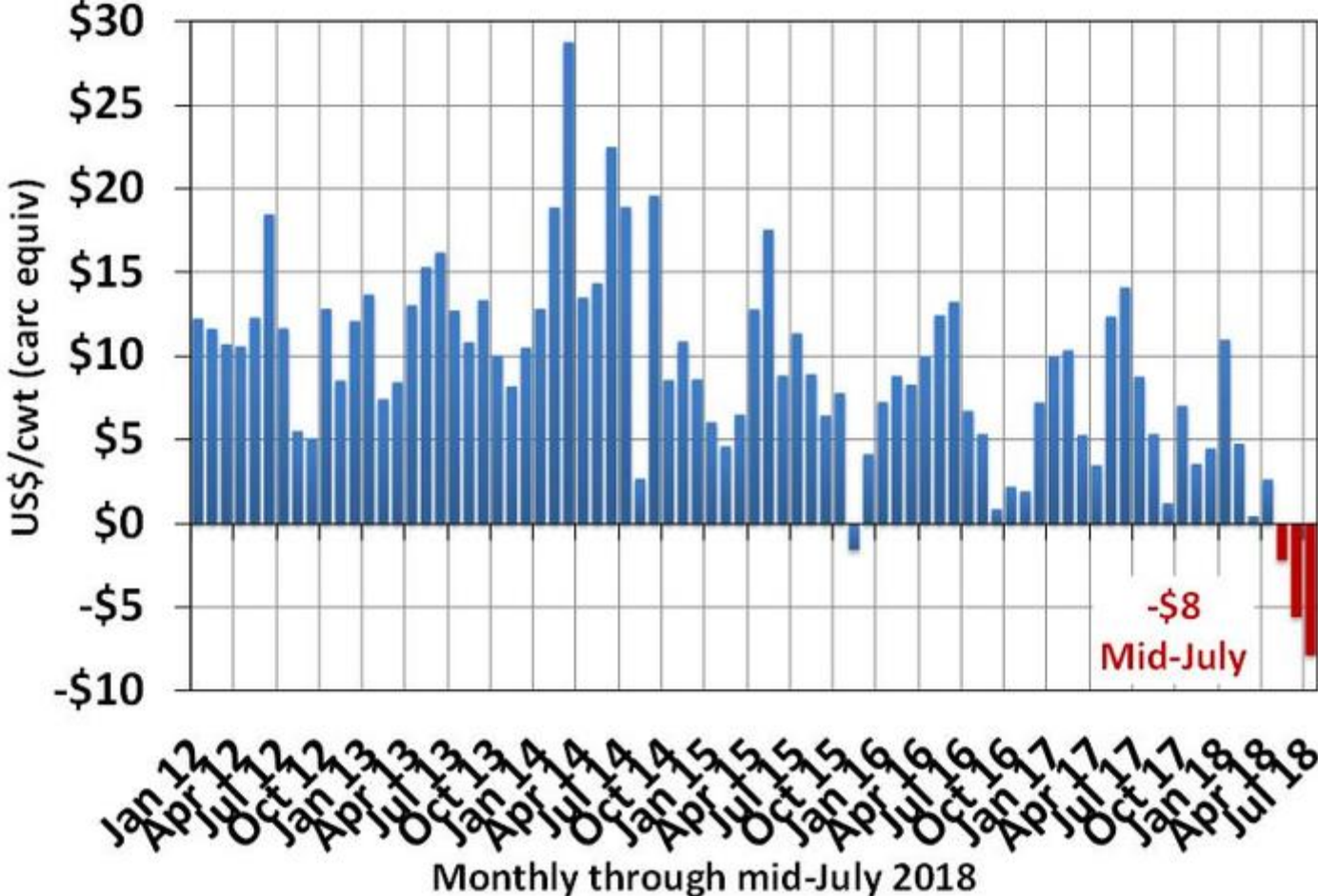






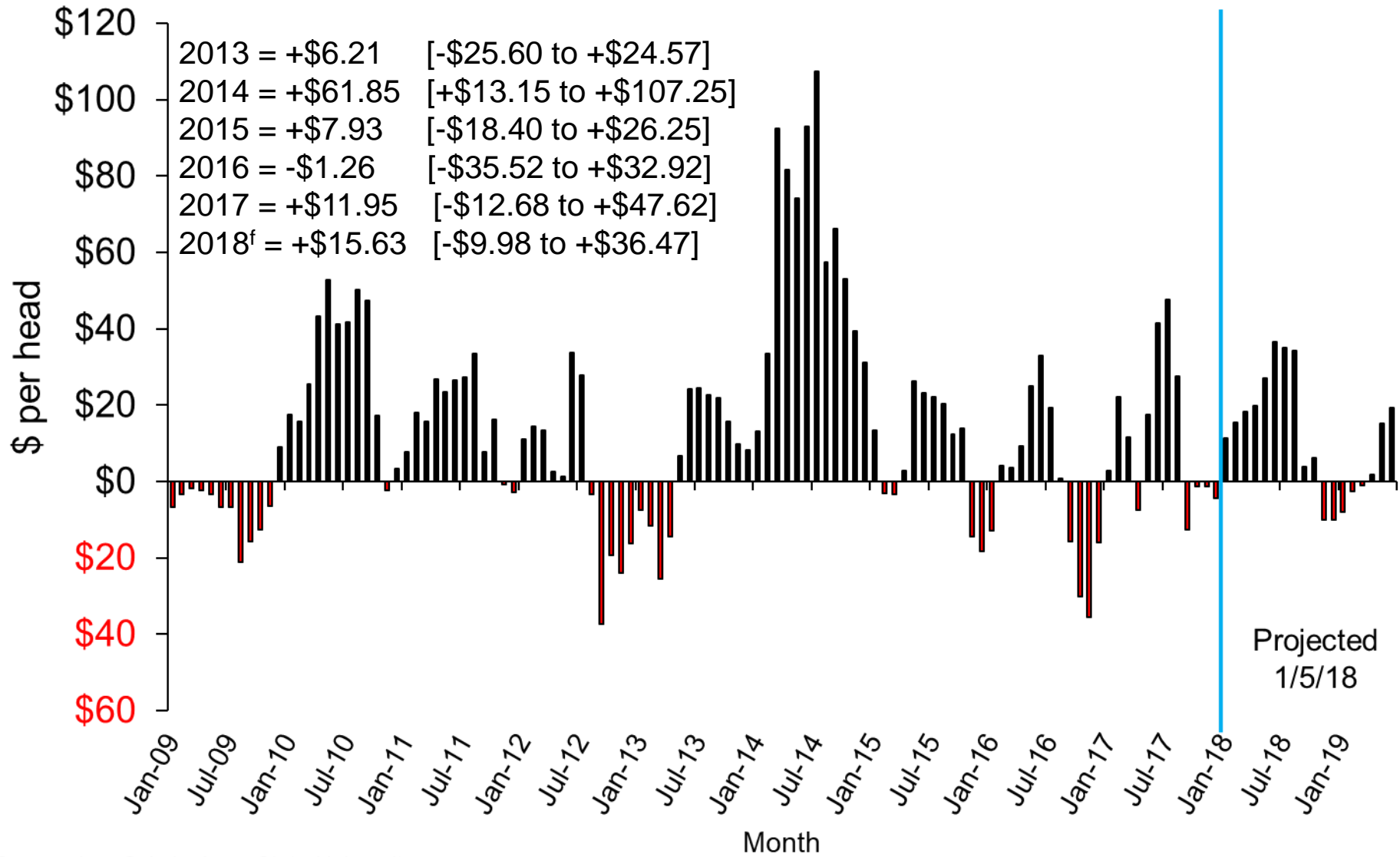


U.S. less CAN Hog Carcass Price Spread



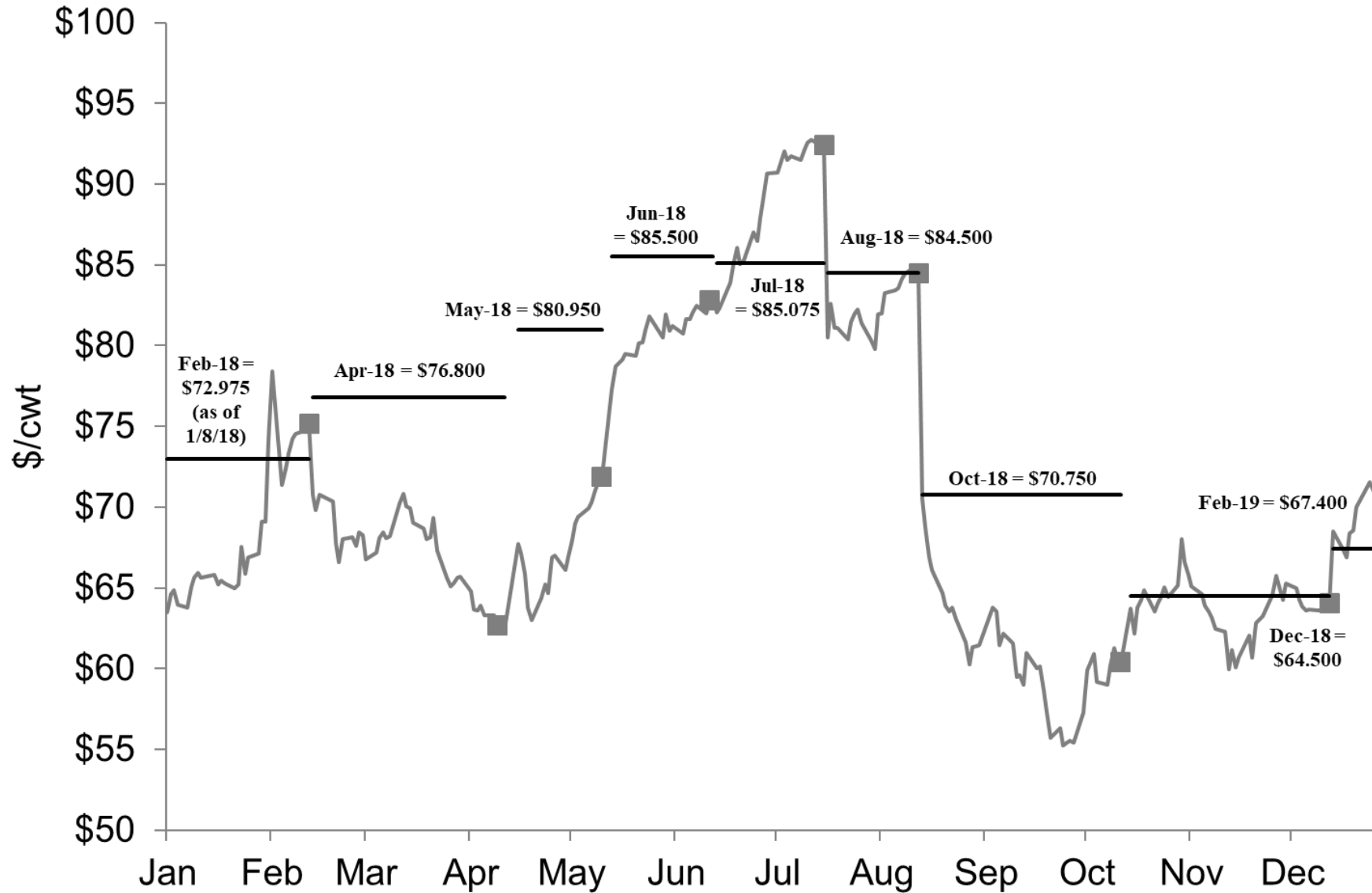
Source: USDA, Agri-Food Canada, Quebec hog price converted to US\$/cwt carc.

Estimated Returns to Farrow to Finish, Iowa Past and Projected with Basis Adjusted Futures

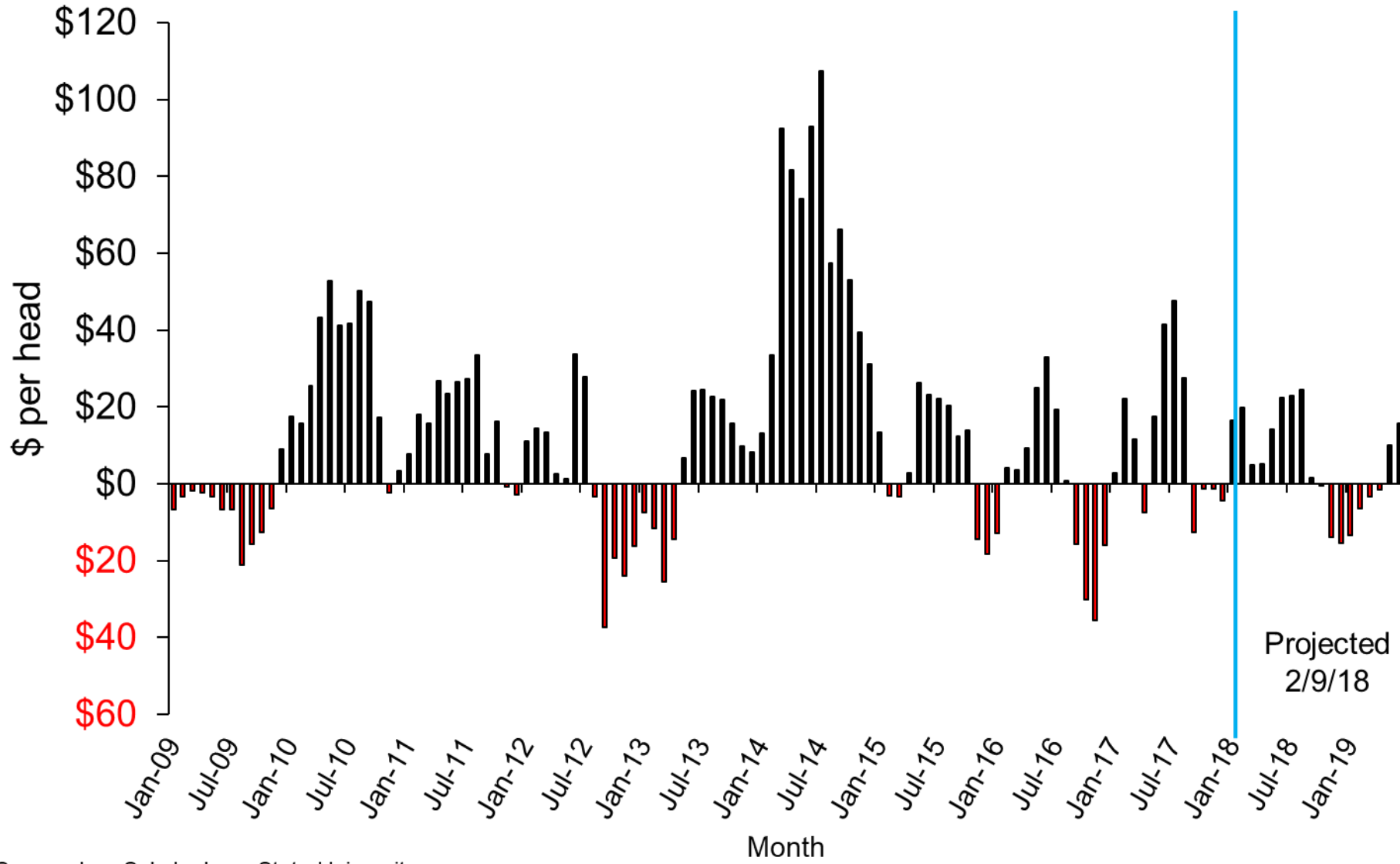


Source: Lee Schulz, Iowa State University

Daily CME Lean Hog Futures, 2017 & 2018 Contracts

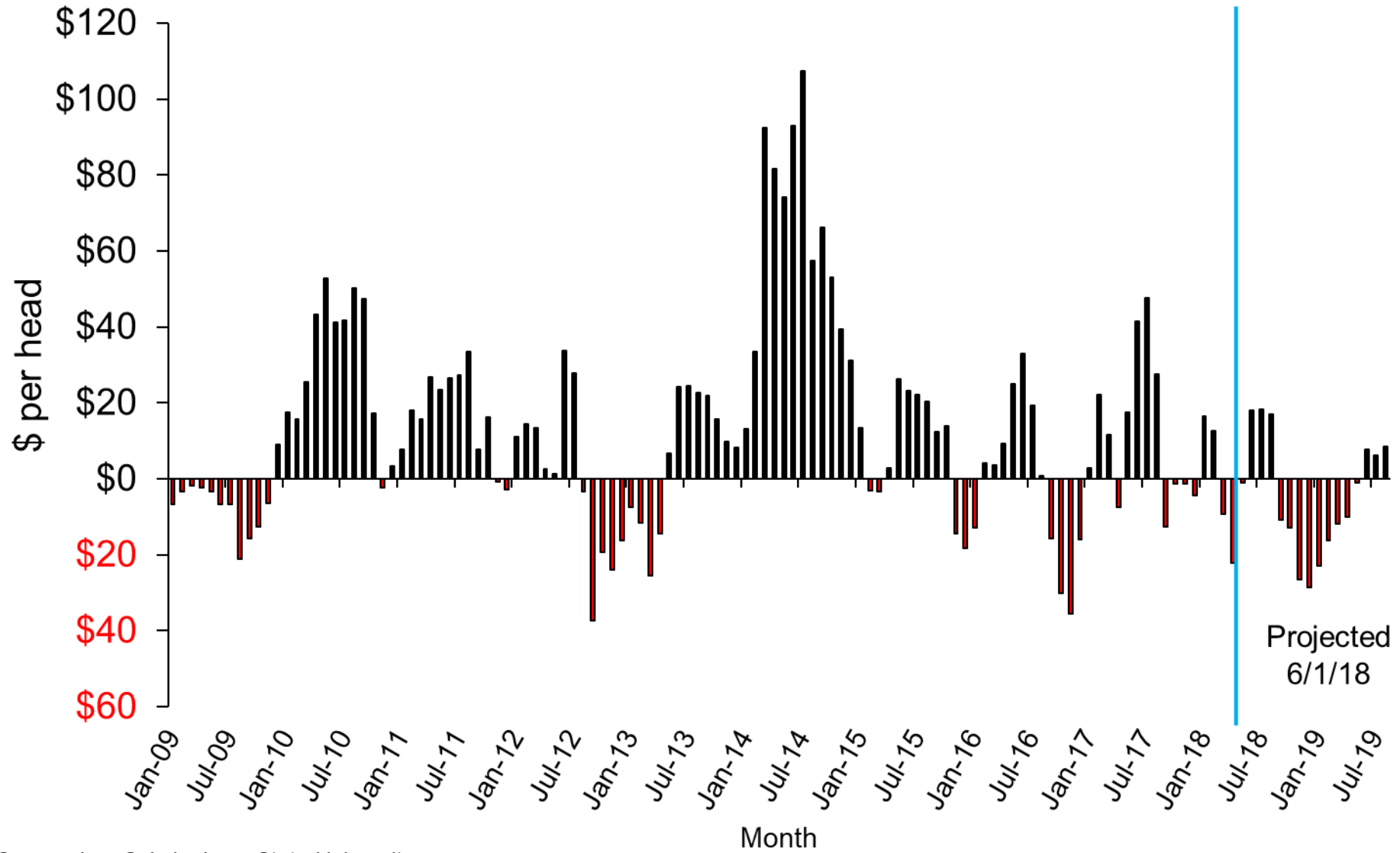


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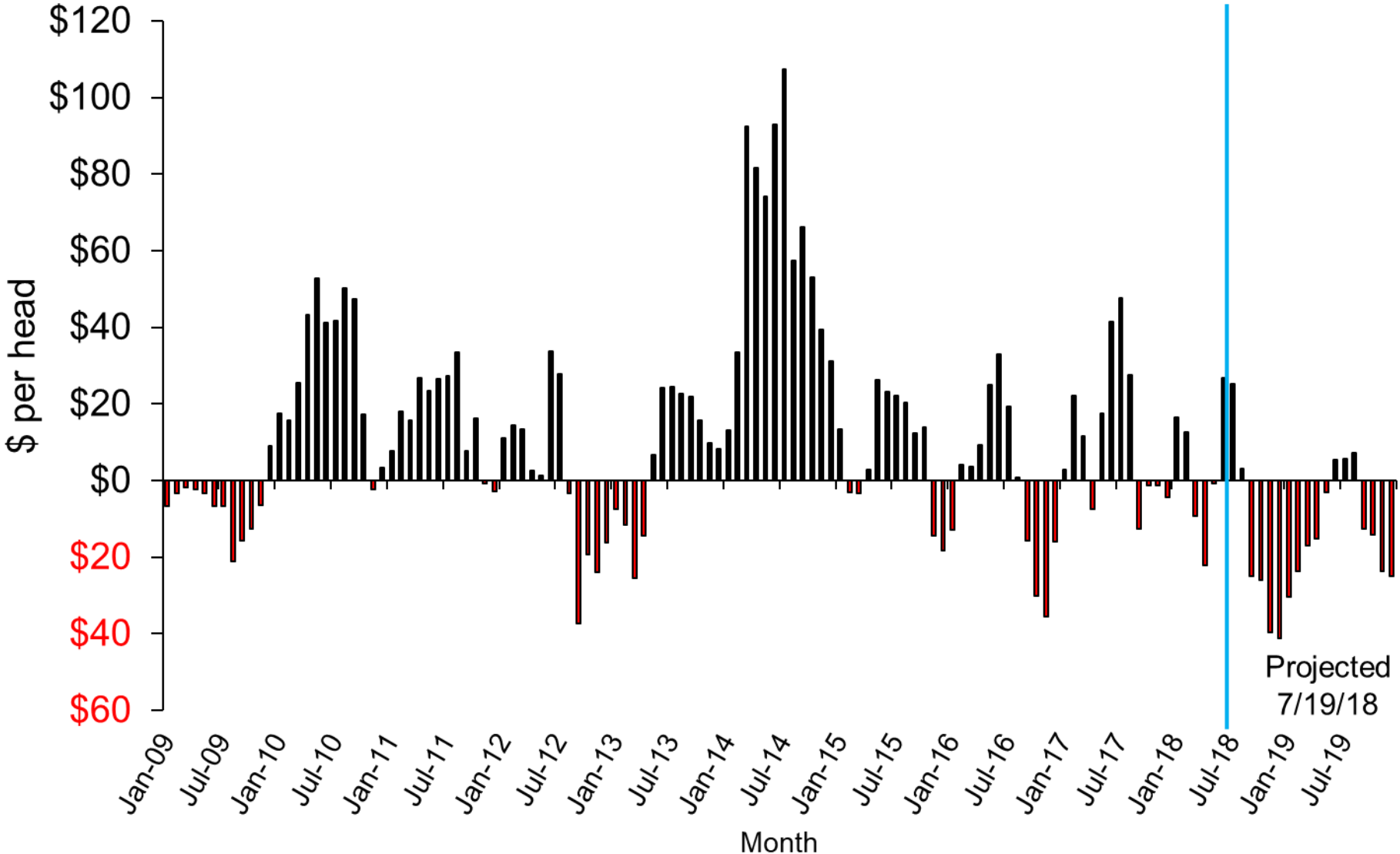
Source: Lee Schulz, Iowa State University

Estimated Returns to Farrow to Finish, Iowa Past and Projected with Basis Adjusted Futures



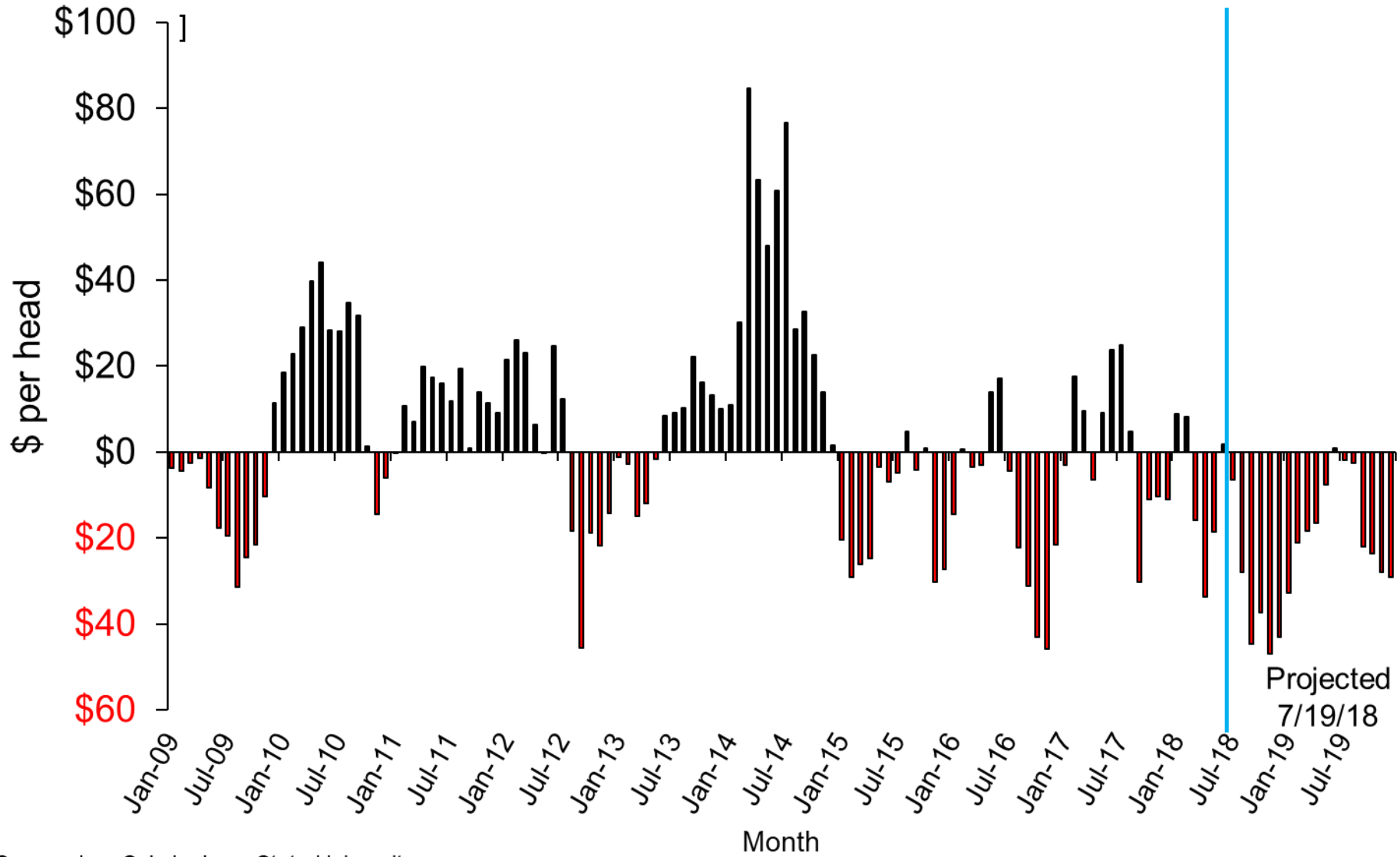
Source: Lee Schulz, Iowa State University

Estimated Returns to Farrow to Finish, Iowa Past and Projected with Basis Adjusted Futures



Source: Lee Schulz, Iowa State University

Estimated Returns to Wean to Finish, Iowa Past and Projected with Basis Adjusted Futures



Source: Lee Schulz, Iowa State University

Projected Iowa Wean to Finish Returns

(<http://www2.econ.iastate.edu/estimated-returns/>)

Projection Date	Market Year	Net Return*	FCOG**	LH Price	SEW Price*	BE FCOG**	BE LH Price	BE SEW Price*
10/4/17	2018	-0.52	40.24	68.51	35.44	40.04	68.77	34.92
11/6/17	2018	3.60	40.55	71.59	36.76	41.94	69.81	40.36
12/7/17	2018	-0.09	40.52	69.76	36.83	40.48	69.81	36.74
1/5/18	2018	2.86	40.39	71.91	38.56	41.50	70.50	41.42
2/9/18	2018	-4.84	40.52	68.63	39.29	38.64	71.03	34.45
3/9/18	2018	-10.15	40.96	67.20	40.55	37.03	72.22	30.40
4/6/18	2018	-18.80	40.87	62.89	40.70	33.58	72.17	21.89
5/4/18	2018	-19.34	41.15	62.83	40.40	33.65	72.38	21.06
6/6/18	2018	-15.56	40.61	64.11	40.61	34.58	71.80	25.05
7/6/18	2018	-16.04	39.75	62.64	40.32	33.54	70.56	24.28
7/19/18	2018	-21.27	39.30	59.48	40.32	31.06	69.98	19.05

*Net return and SEW price is \$/head and all other values are \$/carcass cwt. ** FCOG = Feeding cost of gain. Projected using basis adjusted futures prices.

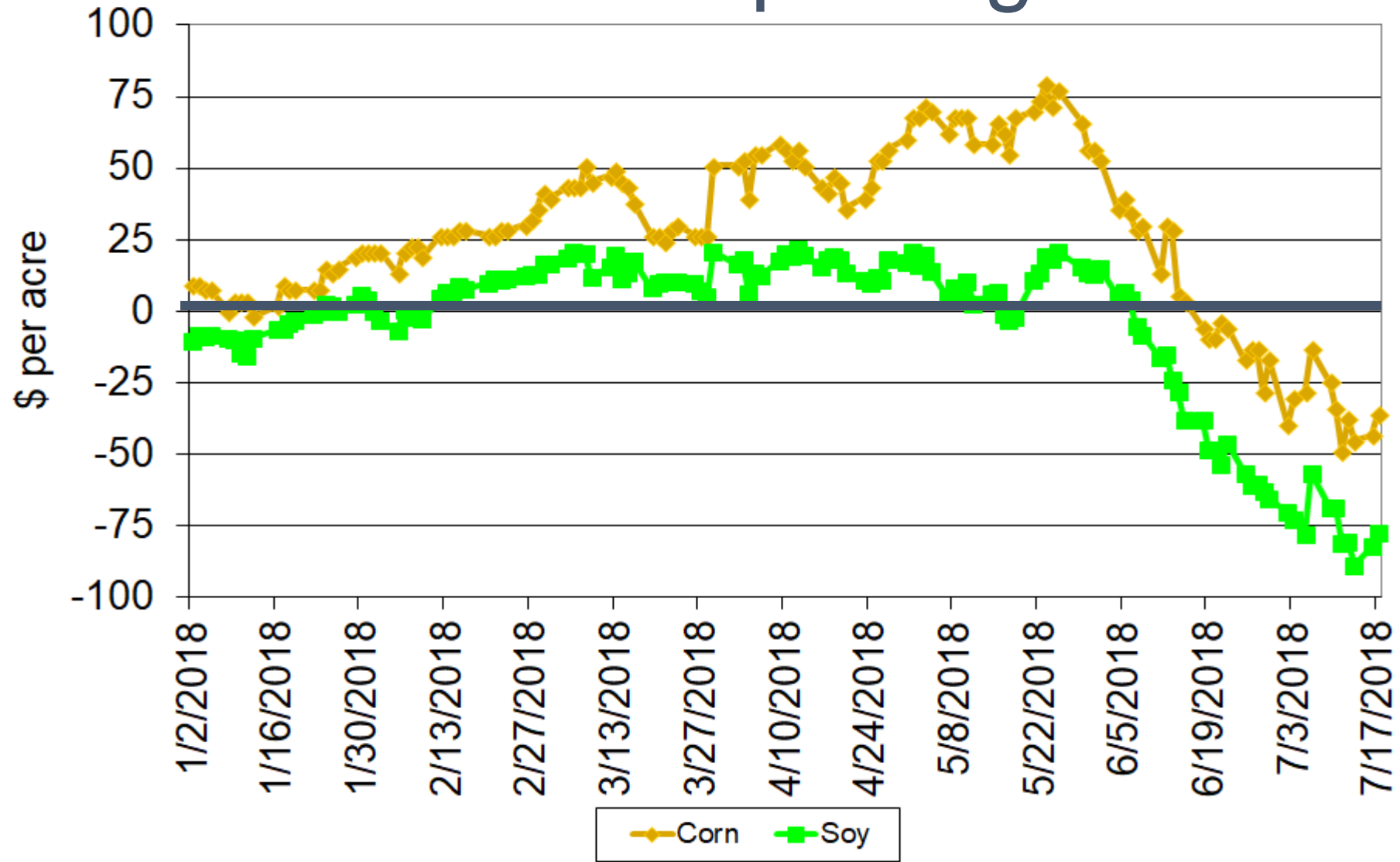
Projected Iowa Farrow to Finish Returns

(<http://www2.econ.iastate.edu/estimated-returns/>)

Projection Date	Market Year	Total Cost \$/carcass cwt	Lean Hog Price \$/carcass cwt	Net Return \$/carcass cwt	Net Return \$/head
10/4/17	2018	63.80	68.51	4.72	9.55
11/6/17	2018	64.18	71.59	7.41	15.00
12/7/17	2018	64.13	69.76	5.64	11.42
1/5/18	2018	64.19	71.91	7.72	15.63
2/9/18	2018	64.44	68.63	4.19	8.49
3/9/18	2018	65.05	67.20	2.16	4.37
4/6/18	2018	64.86	62.89	-1.97	-3.99
5/4/18	2018	65.25	62.83	-2.42	-4.90
6/6/18	2018	64.47	64.11	-0.36	-0.72
7/6/18	2018	63.33	62.64	-0.70	-1.41
7/19/18	2018	62.79	59.48	-3.31	-6.69

Projected using basis adjusted futures prices.

2018/19 Crop Margins

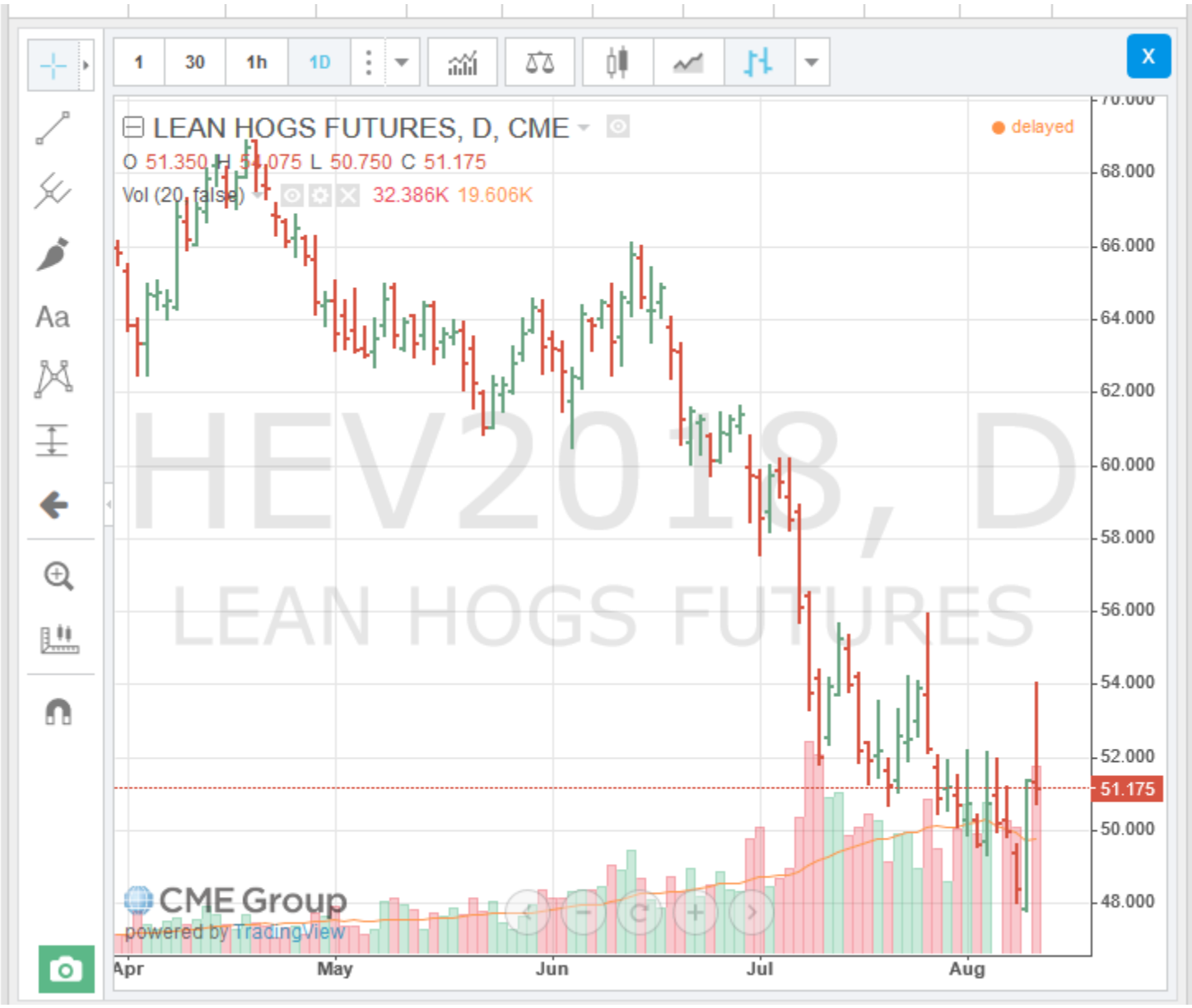


Economic model

- US will continue to export soybeans to China, this means that a 25% wedge will exist
- If the US was equal to half the world soybean production, then the US price should fall by 12.5%
- But we only produce one third of world soybeans, so the US price will be about \$1.75 per bushel lower
- If beans are \$1.75 lower then corn should be \$0.70/bu lower
- Based on this years crop and expected carryout corn is \$0.50 per bushel below where it should be

Model based estimates

- The impact of one million dollars of pork variety meat exports on live hog values was \$0.02 per hundredweight over a one month period
- \$850 million in VM meat exports are at risk this is \$70 million per month, this is \$3.08 per animal per month
- We exported 1.4% of pork muscle meat to China and about 8% to Mexico. Exports to Hong Kong are also down due to increased inspections by China
- There will be some backfilling (trade diversion) so assume that we lost a market equal to 5% of production. This represents a 10% (\$15 per head loss)
- There seems to be an interaction effect, the impact of the two duties is greater than one would expect by just adding the separate impacts





How long will this last?

- November 2019 soybean futures fell by one half as much as November 2018 futures, this suggests a 50% chance the war will be over in one year
- Same is true for hog futures
- Personal observation: Mexicans and Chinese are as tuned into Trump's statements as we are, they seem ready to bear a financial burden to avoid the appearance of being bullied or bluffed
- President Xi holds on to power because people are afraid of him. He cannot afford to look weak.....

AAEA special session

- Charm versus bullying: trade negotiators get their back up. Darci Vetter versus Lighthizer, South Africa example.
- Lighthizer: Trade is a zero sum game (has he had econ 101?)
- Demand for investment in US, plus federal deficit greater than American savings. So we import dollars
- A country that ignores benefits of comparative advantage in the value chain will be at a disadvantage
- Some of the losses in Michigan are due to shifting auto industry to the non unionized south, only textiles have actually declined
- De-unionization, coupled with technology increased the penalty against poorly educated workers, they blamed this on trade
- Ag Business students are pro-trade even though technology is forcing them off the farm

The *Farm Income Loss* Payout

- Rules for allocating the \$12 billion dollars will be completed by labor day, funds will be allocated before the November elections
- The USDA is using the change in the season average price, this will reduce the impact because some speculators expect the war to end soon
- No income limitations in the CCC authorization, but it seems unlikely that Smithfield will get a big check, fallback may be the 2014 farm bill
- Many producers have hedged and others will collect on RP, so dollars will not go to those most hurt by the duties

Impact on US competitiveness

- The US pork industry does not have a 20% production cost advantage over Mexico
- US soybean producers do not have a 25% cost advantage over Brazil
- If the war goes on long enough, we will need to downsize production by 10% for pork and 30% for soybeans

Table 4. Predicting China's Import Potential from the United States

	Increase in import quantity			Increase in import value (\$billion)		
	Low	Middle	High	Low	Medium	High
Corn	16.5 MMT	33.1 MMT	49.6 MMT	3.7	7.4	11.1
Wheat	8.9 MMT	17.9 MMT	26.8 MMT	2.4	4.9	7.3
Beef	0.2 MMT	0.5 MMT	0.7 MMT	0.9	1.8	2.7
Pork	2.2 MMT	4.3 MMT	6.5 MMT	4.5	8.9	13.4
Chicken	0.6 MMT	1.3 MMT	1.9 MMT	4.9	9.9	14.8
Cotton	55 TMT	110 TMT	165 TMT	0.11	0.22	0.33
Ethanol	110 Mil. L	220 Mil. L	330 Mil. L	0.08	0.15	0.22
Distiller grains	0.66 MMT	1.33 MMT	2.0 MMT	0.18	0.36	0.54
Others				0.87	1.7	2.6
Total				17.6	35.3	53.0