



## Fields of Uncertainty

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# Table of Contents

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## *Sections*

I	A Macro Look
II	Corn
III	Soybeans
IV	Vegetable Oil
V	Wheat



## I. A Macro Look



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# China and the United States Are Talking?!

- Current State of Affairs
  - 90 day “cooling off” period ends March 1
  - It appears higher tariffs will be delayed while talks are ongoing.
  - China has purchased U.S. soybeans & has promised to purchase more—YTD: 2.6 MMT versus 24.3 MMT in 2017/18
  - U.S. agriculture remains the biggest loser
  - This will not be solved by March 1.
- U.S. soybeans have been hit the hardest.
  - U.S. soybeans have become more competitive in the world market
  - The supply chain now becomes more expensive and less efficient.
- Other U.S. agricultural products are subject to Chinese tariffs, e.g. wheat, hay, dairy
- U.S. believes they have a strong negotiating position against China.
  - “China has more to lose in a trade war than the U.S.”
- Likewise, the Chinese perspective is they have the upper hand and they are settled in for the long haul.
- The issues surrounding intellectual property, copyright, trademark, following WTO rules etc. are being addressed—these issues are the root of longstanding many trade issues with China.

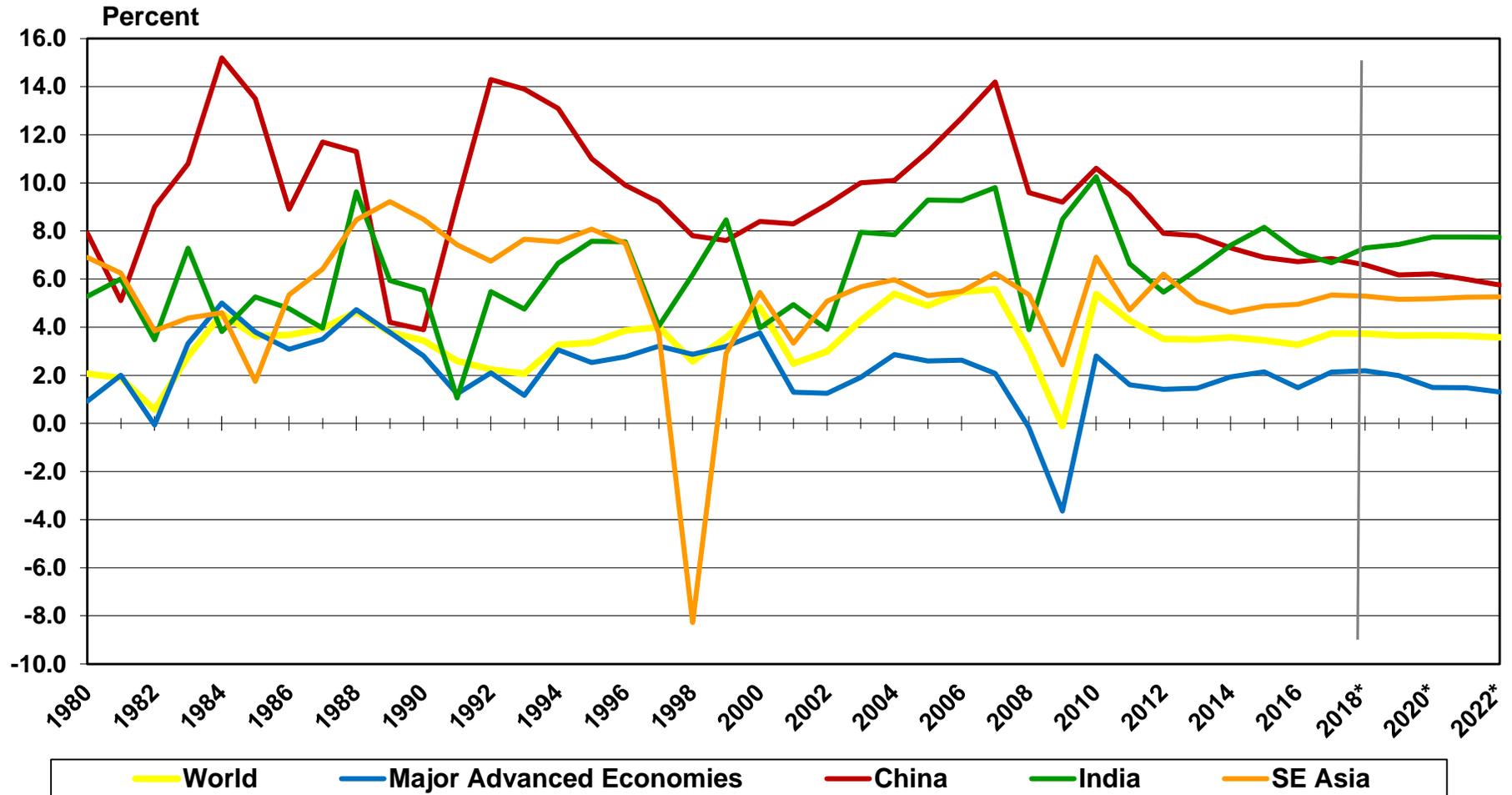


# Global Economic Growth Has Been Dialed Back

Trade tensions, market volatility, pullback on QE by Central Banks & increasing rates are likely to slow economic growth further.



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Source: IMF, October 2018, Rabobank 2019  
SE Asia includes Indonesia, Malaysia, Philippines, Thailand & Vietnam  
\* Projections

# Weekly U.S. Dollar Index

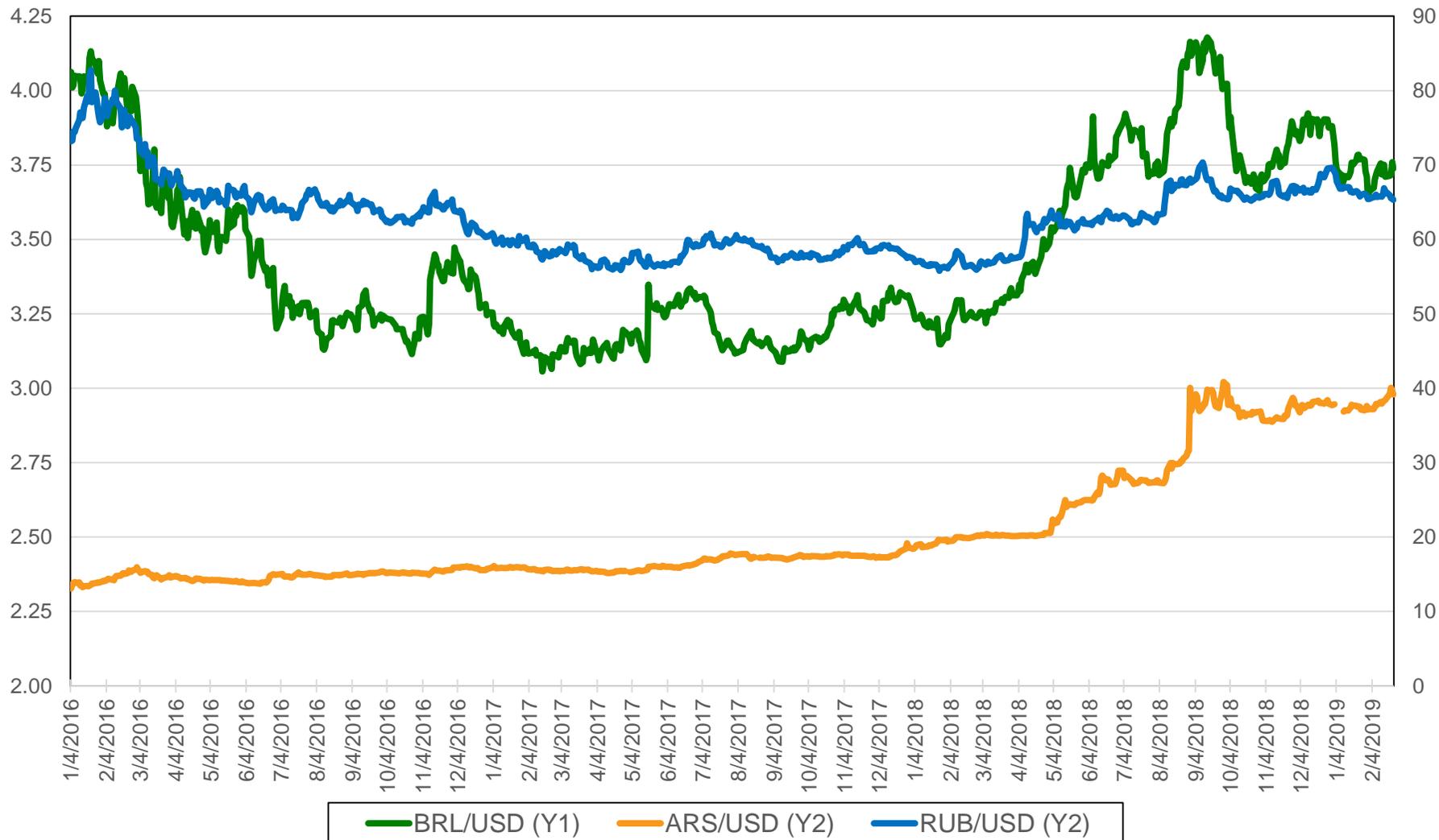
## Expectations U.S. dollar to weaken in 2019, but...





# Major AG Export Competitor's Currencies Value vs. USD is Crucial

Depreciation against USD due to negative changes in their economies—not favorable to U.S. agricultural exports

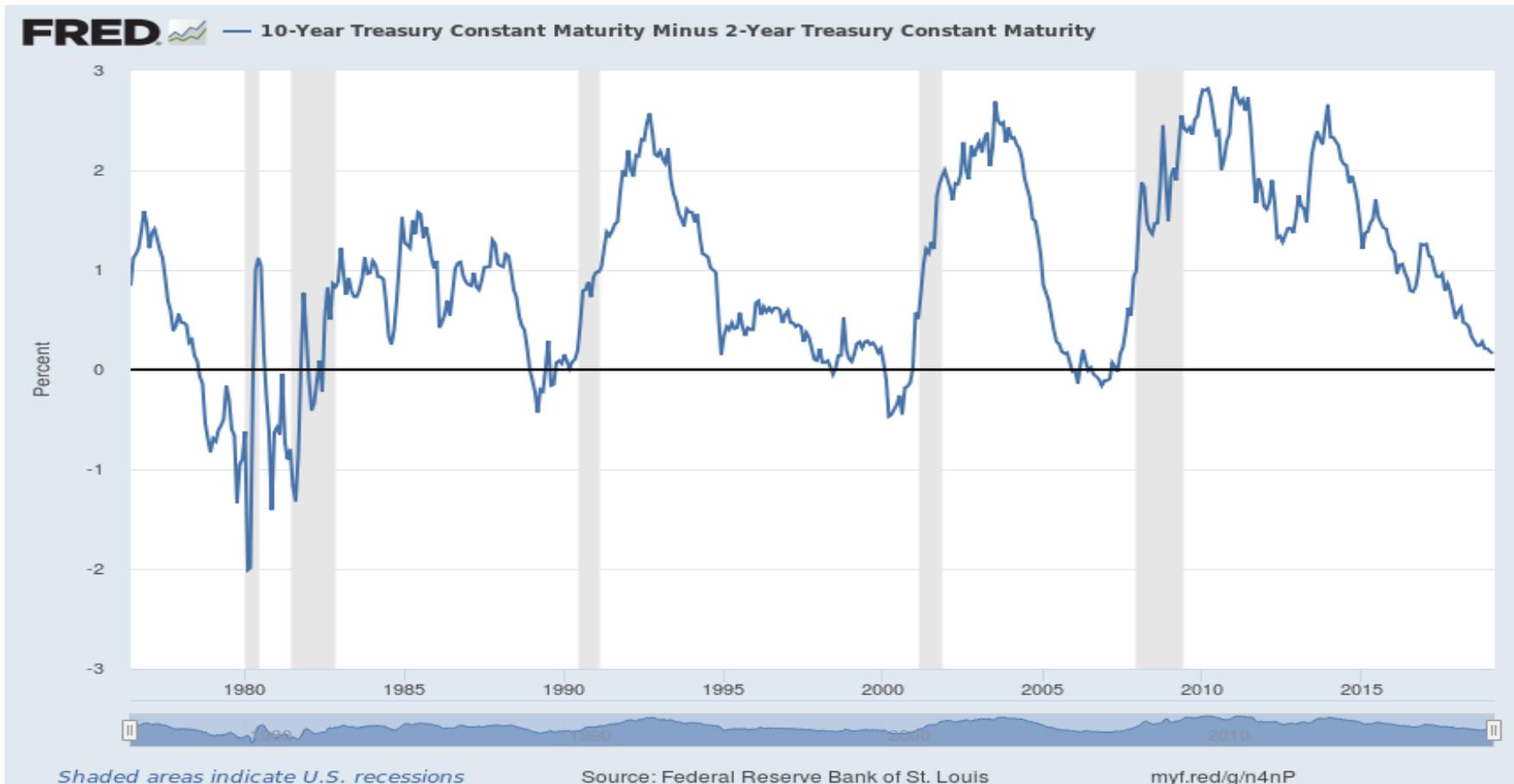


Source: Pacific Exchange Rate Service, Rabobank 2019



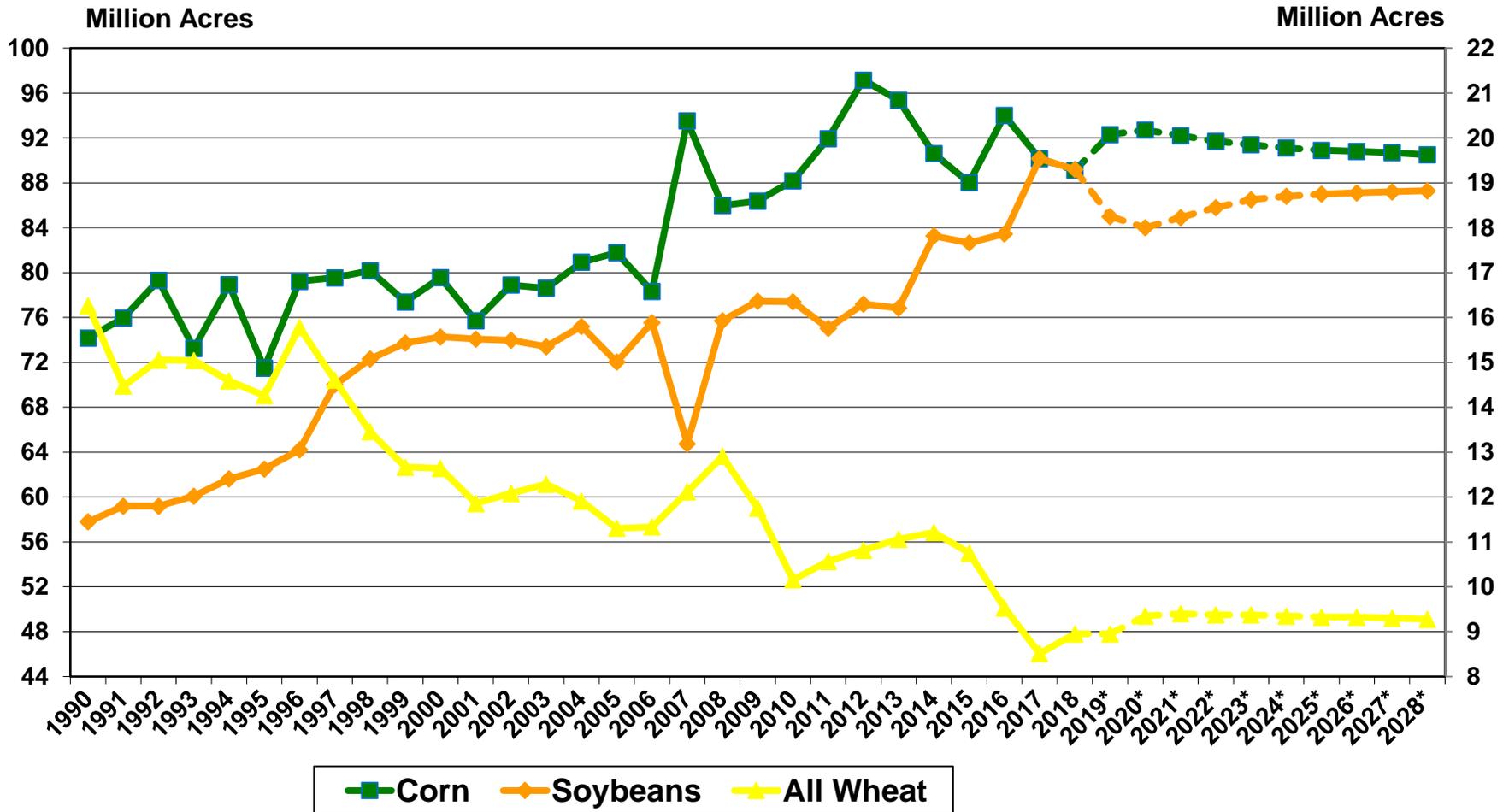
# Flattening Yield Curve is a Strong Indicator of Coming Recession

- In the past five recessions, the average time period between the yield curve inverting and the coming recession is 19.6 months. It has ranged between 10-33 months
- The current expansion is over 9 years old and is second only in length to the Mar 1991-Mar 2001 time period



# Major U.S. Row Crop Planted Acres

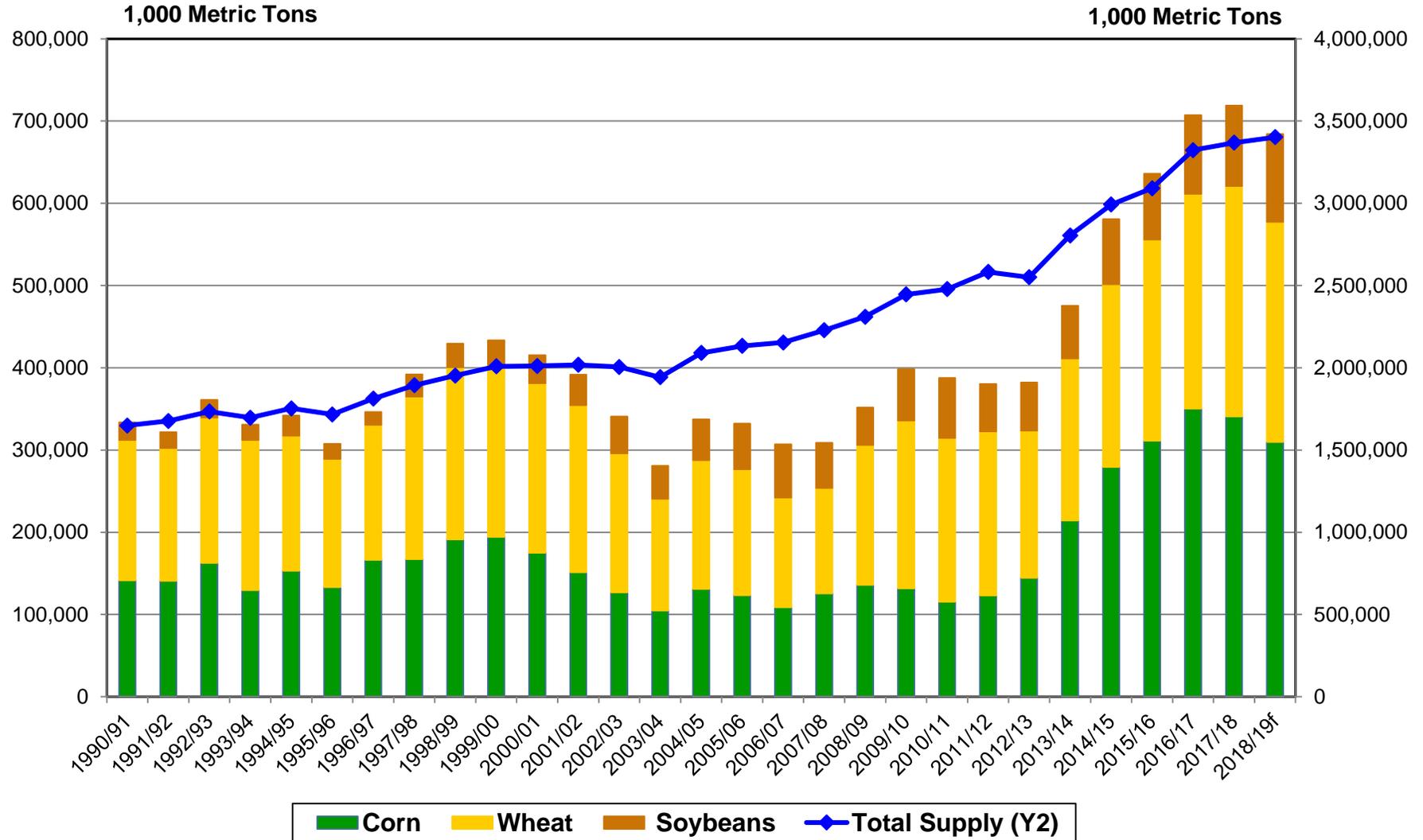
First indication of 2019 U.S. Winter Wheat Plantings showed a 1.245 mln acre decline to 31.29 mln  
 In Feb. estimates USDA is Corn planted acres @ 92.0 mln, soybeans @ 85.0 mln & wheat @ 47.0 mln



\* Rabobank projections  
 Source: USDA, Economic Research Service, Rabobank 2019

# Global Grain Supply (corn, soybeans and wheat) at Record Levels

Current projections indicate the third largest global stocks on record



Source: USDA/FAS, Rabobank 2019



## II. Corn



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# Corn--Bulls and Bears

## ***Bullish Factors***

- Strong U.S. exports
- U.S. & global corn stocks & stocks-to-use ratio declining
- Farmers are holding corn
- Growing livestock numbers
- Solid ethanol exports
- Funds adding to long corn position

## ***Bearish Factors***

- Little growth in demand side of balance sheet
- Farmers are holding corn—large stocks in country
- Basis levels remain wide—more than adequate available corn supplies
- Upward revision in Chinese corn stocks
- RFS remains flat & ethanol production declining in near term
- Flat to declining gasoline use

## ***Swing Factors***

- Argentine and Brazilian corn crop in 2019
- U.S. Dollar
- U.S. trade policy
- Profitability in domestic livestock sector
- Spread of African Swine Fever
- China export promises

# U.S. Corn Balance Sheet

(million bushels, unless otherwise noted)



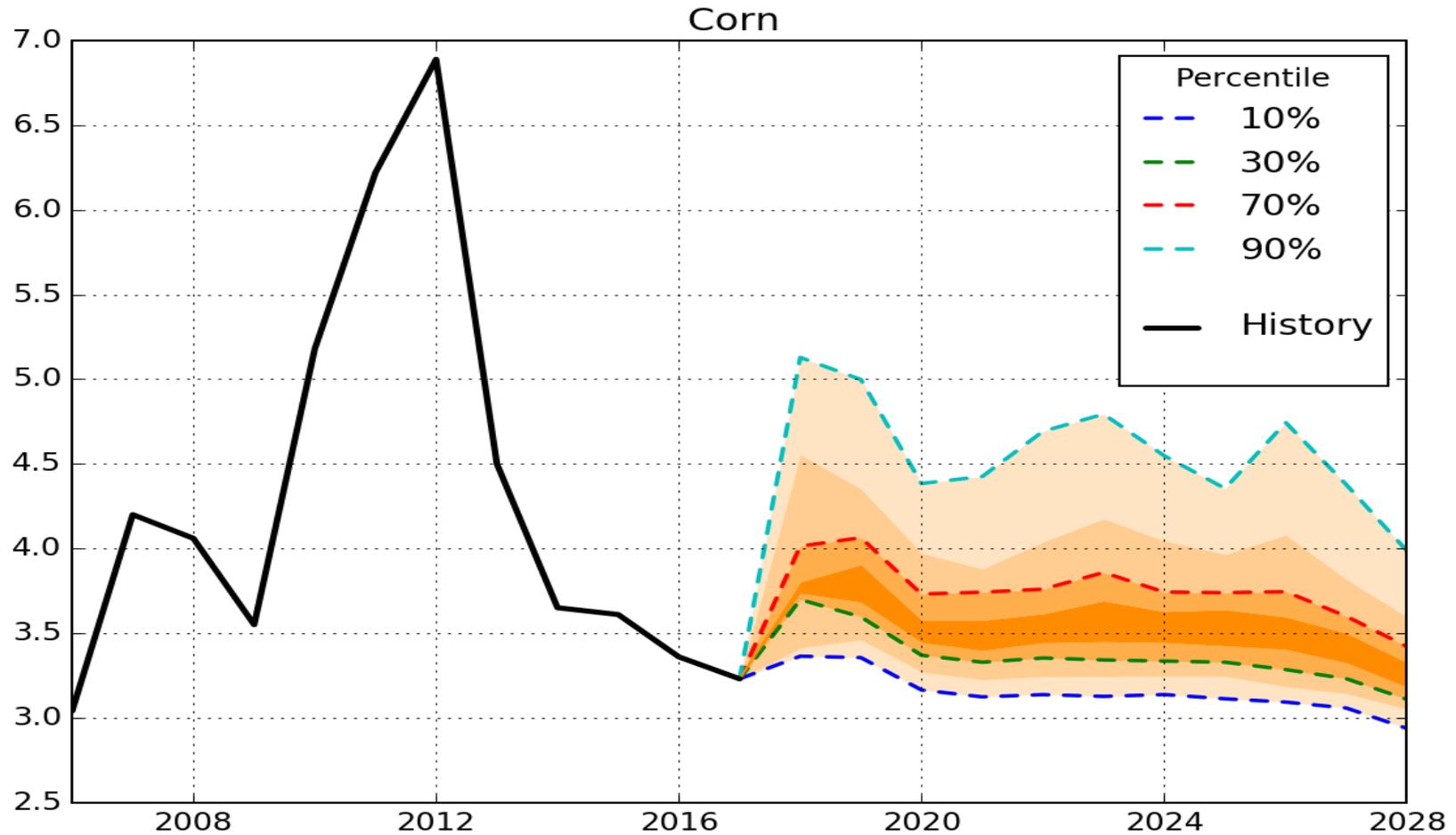
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	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	USDA 2018/19*	Rabo 2019/20*
Planted Acres (mln)	88.2	91.9	97.3	95.4	90.6	88.0	94.0	90.2	89.1	92.3
Harvested Acres (mln)	81.4	84.0	87.4	87.5	83.1	80.8	86.7	82.7	81.7	84.8
Yield (bu./acre)	152.6	146.8	123.1	158.1	171.0	168.4	174.6	176.6	176.4	177.7
<b>Supply</b>										
Beginning Stocks (9/1)	1,709	1,127	989	819	1,232	1,731	1,737	2,293	2,141	1,778
Production	12,425	12,314	10,755	13,829	14,216	13,602	15,148	14,609	14,420	15,066
<b>Imports</b>	28	29	160	36	32	68	57	36	40	44
<b>Total Supply</b>	<b>14,161</b>	<b>13,471</b>	<b>11,904</b>	<b>14,686</b>	<b>15,479</b>	<b>15,402</b>	<b>16,942</b>	<b>16,939</b>	<b>16,601</b>	<b>16,888</b>
<b>Disappearance</b>										
Feed	4,770	4,512	4,309	5,001	5,280	5,114	5,470	5,304	5,375	5,683
Food, Seed & Industrial	6,434	6,424	6,044	6,532	6,601	6,648	6,885	7,056	7,040	6,917
<i>Ethanol of Fuel</i>	<i>5,019</i>	<i>5,000</i>	<i>4,641</i>	<i>5,124</i>	<i>5,200</i>	<i>5,224</i>	<i>5,432</i>	<i>5,605</i>	<i>5,575</i>	<i>5,259</i>
Exports	1,831	1,539	730	1,921	1,867	1,901	2,294	2,438	2,450	2,462
<b>Total Disappearance</b>	<b>13,033</b>	<b>12,482</b>	<b>11,083</b>	<b>13,454</b>	<b>13,748</b>	<b>13,664</b>	<b>14,649</b>	<b>14,798</b>	<b>14,865</b>	<b>15,062</b>
<b>Ending Stocks</b>	<b>1,128</b>	<b>989</b>	<b>821</b>	<b>1,232</b>	<b>1,731</b>	<b>1,737</b>	<b>2,293</b>	<b>2,141</b>	<b>1,736</b>	<b>1,826</b>
<b>Stocks-to-Use Ratio (%)</b>	<b>8.5%</b>	<b>7.7%</b>	<b>7.2%</b>	<b>8.7%</b>	<b>12.6%</b>	<b>12.7%</b>	<b>15.7%</b>	<b>14.5%</b>	<b>11.7%</b>	<b>12.1%</b>
<b>Average Farm Price (\$/bu.)</b>	<b>\$5.18</b>	<b>\$6.22</b>	<b>\$6.89</b>	<b>\$4.46</b>	<b>\$3.70</b>	<b>\$3.61</b>	<b>\$3.36</b>	<b>\$3.36</b>	<b>\$3.60</b>	<b>\$3.60</b>

\* Projections

# National Average Farm Received Prices

70% probability that prices will be under \$4.00 per bushel



# Corn Price Curve Shows Trade's Stock-to-Use Expectations

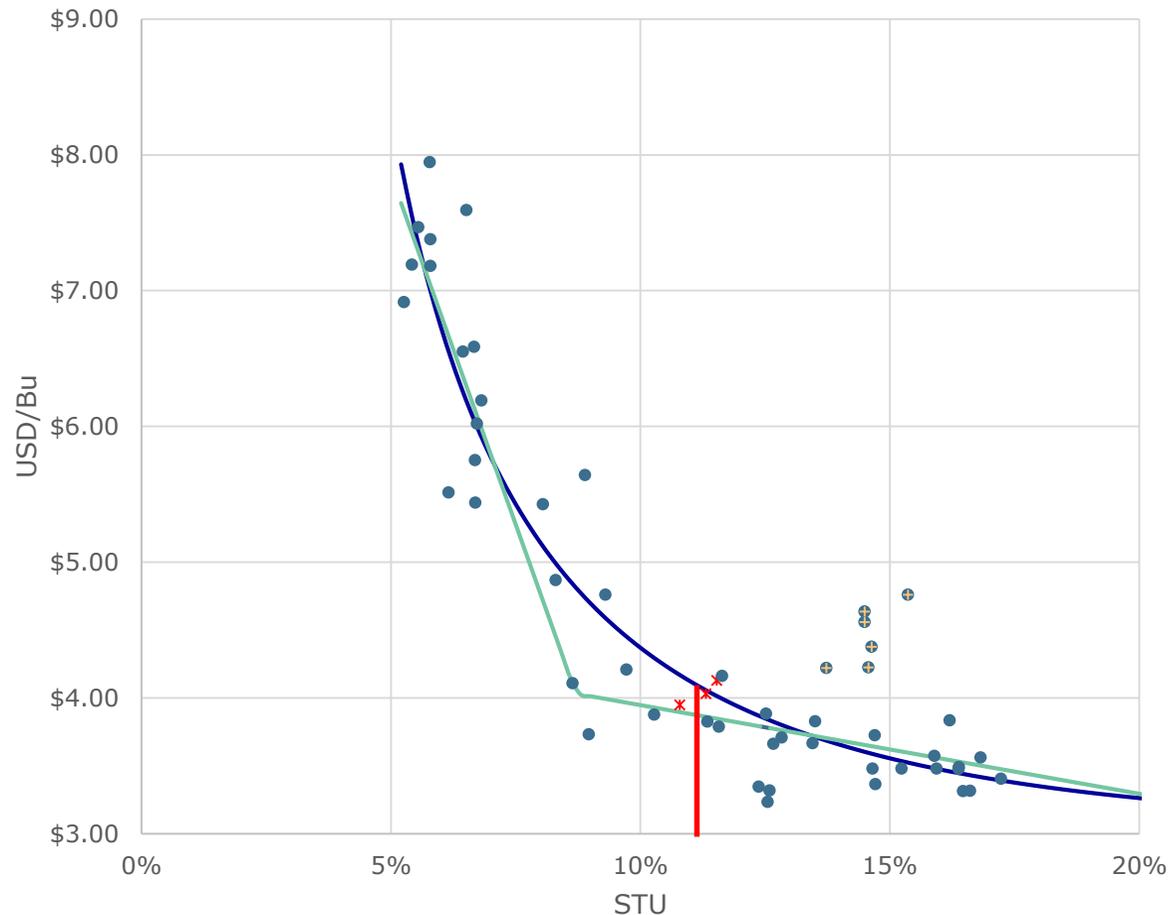
CZ19 fairly trading based on the fundamentals



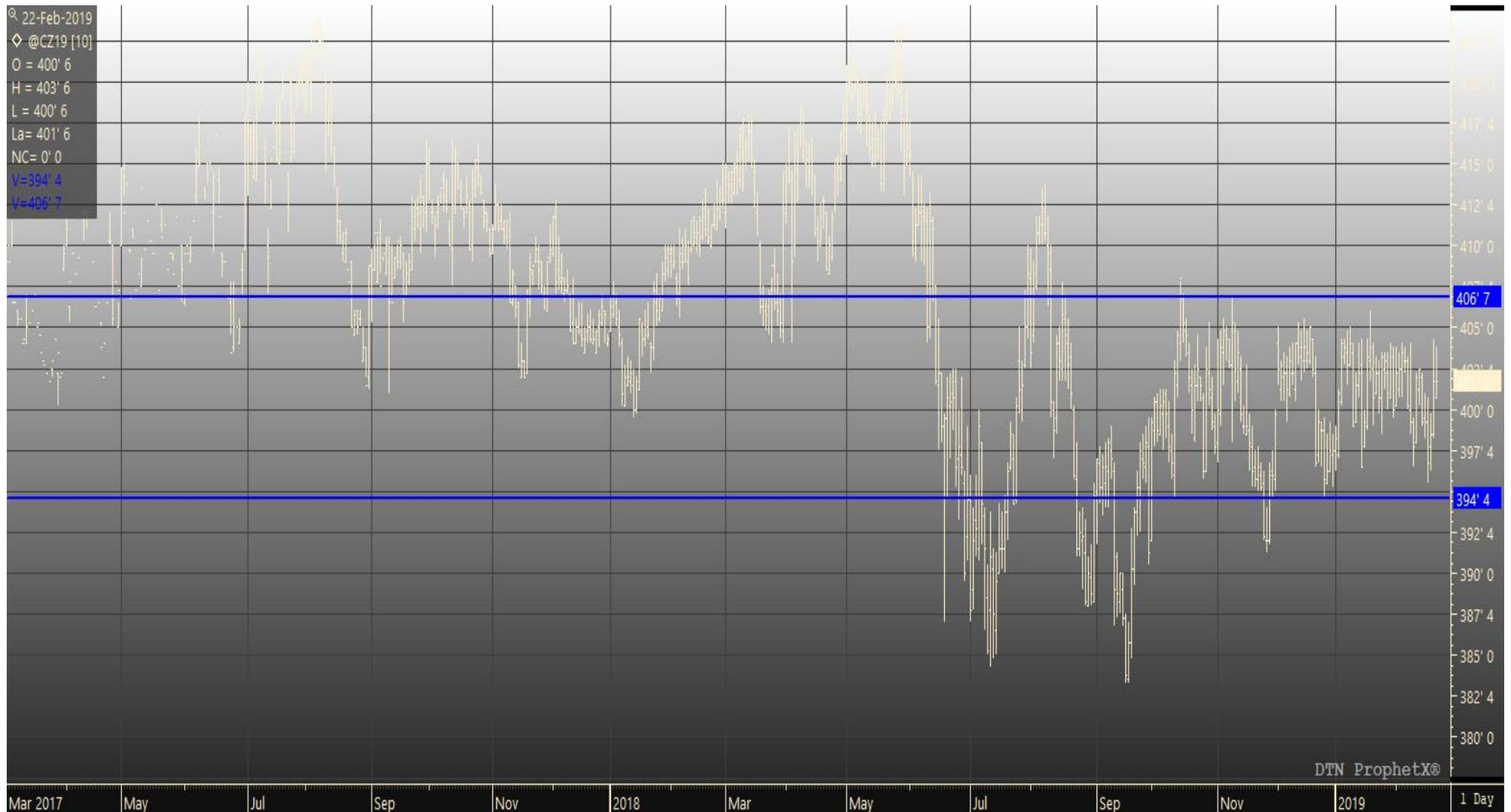
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Time adjusted December Corn Futures

- December 2019 futures (CZ19) trading just around \$4.00 per bushel which corresponds to approximately a 12% Stocks-to Use Ratio.
- Assuming planted corn acres of 92 million and a yield, 176.5 bushels per acre and flat demand results in a 10.6% stocks-to-use ratio.
- Assuming the above, CZ19 should be trading around \$4.00 which is where the market it trading.
- With a carry market, that CZ19 @ \$4.00 will erode assuming normal weather.

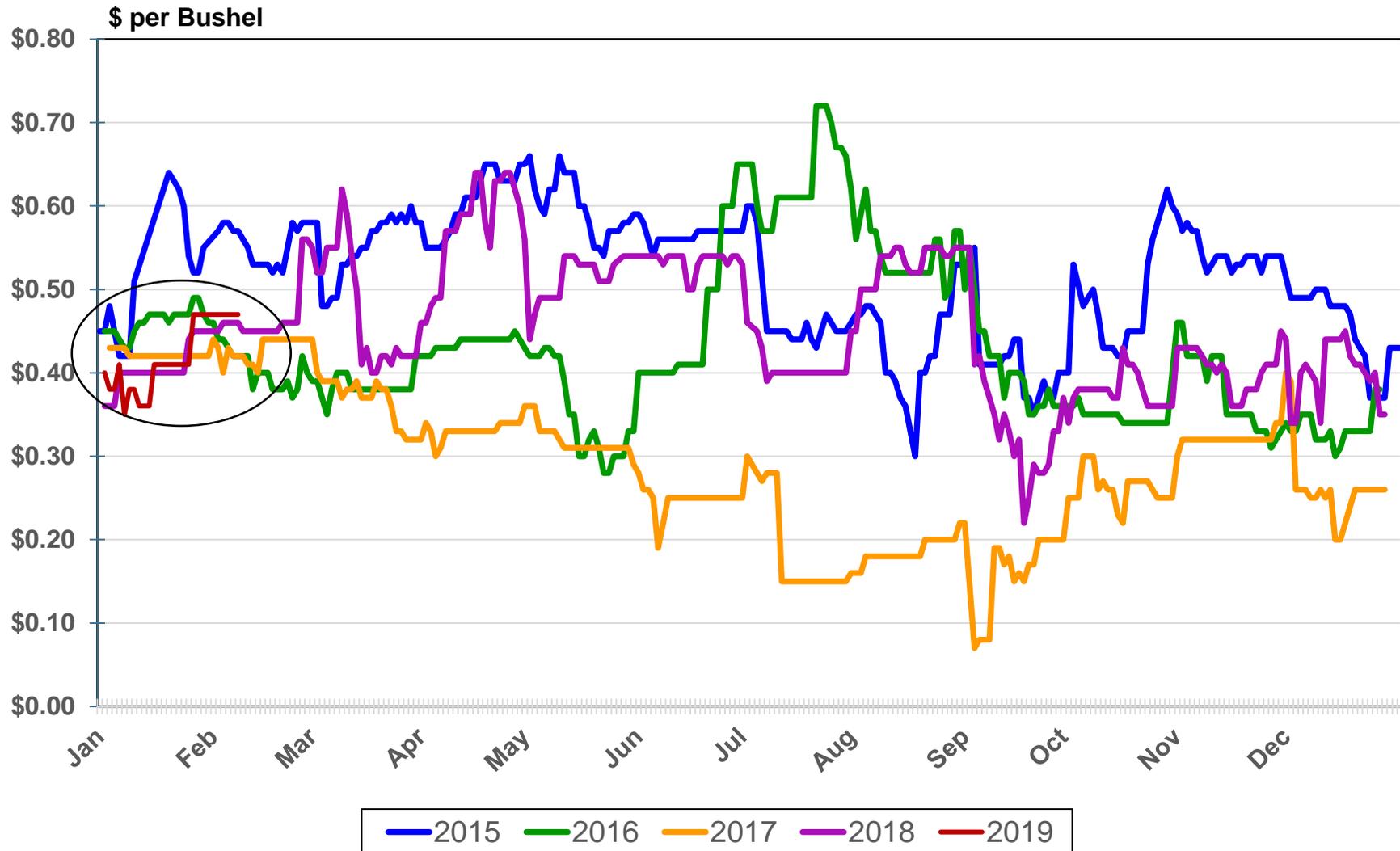


# Dec Corn Futures (CZ19) is Range Bound



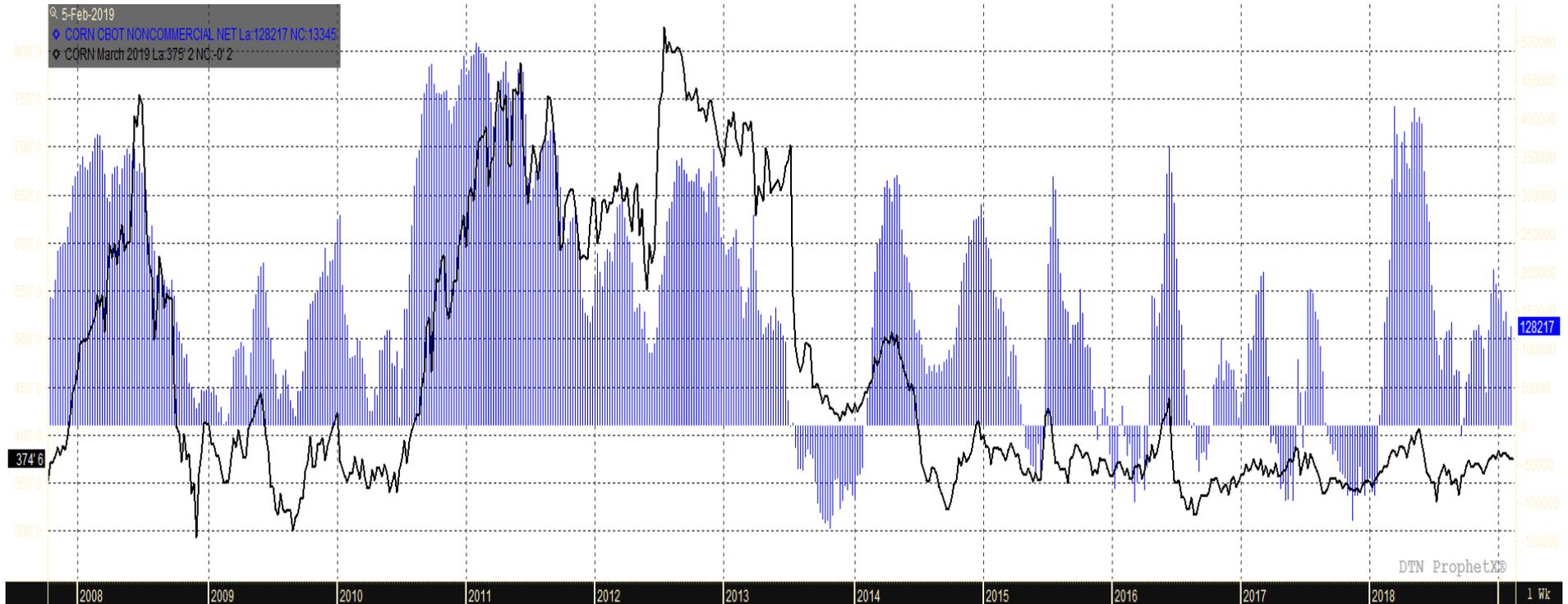
# Gulf CIF Corn Basis

Pickup in U.S. exports have supported CIF values, but more volatile this year and going forward...basis is where the opportunities are going to be.



Source: DTN

# Funds Have Been Adding to Net Long Position



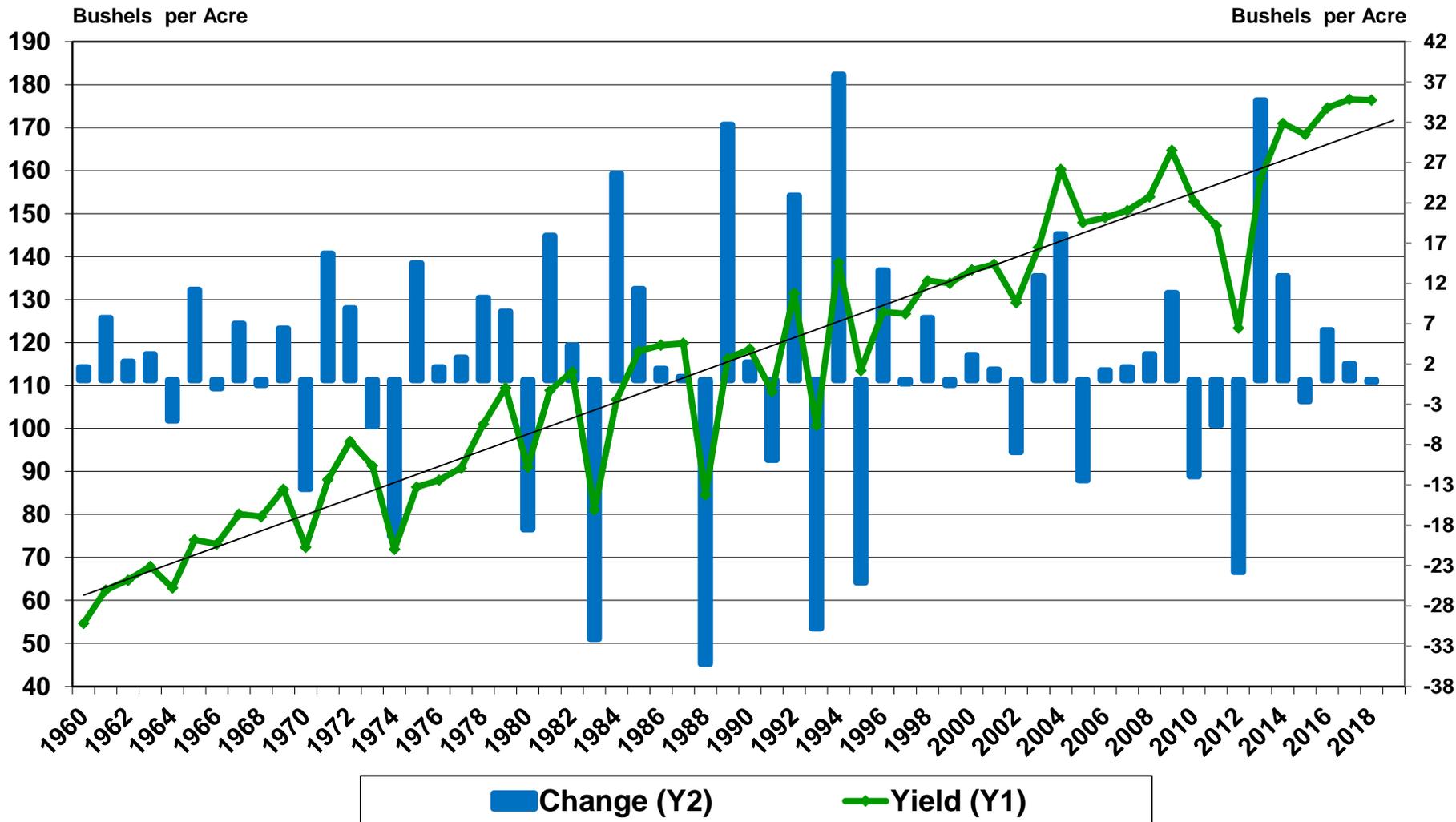
# U.S. Corn Yield Most Persistent Trend in Agriculture

2019 trend yield (1960-2017) is 171.7bu./acre

In 2019, will corn yield return to trend after five years of being above trend?

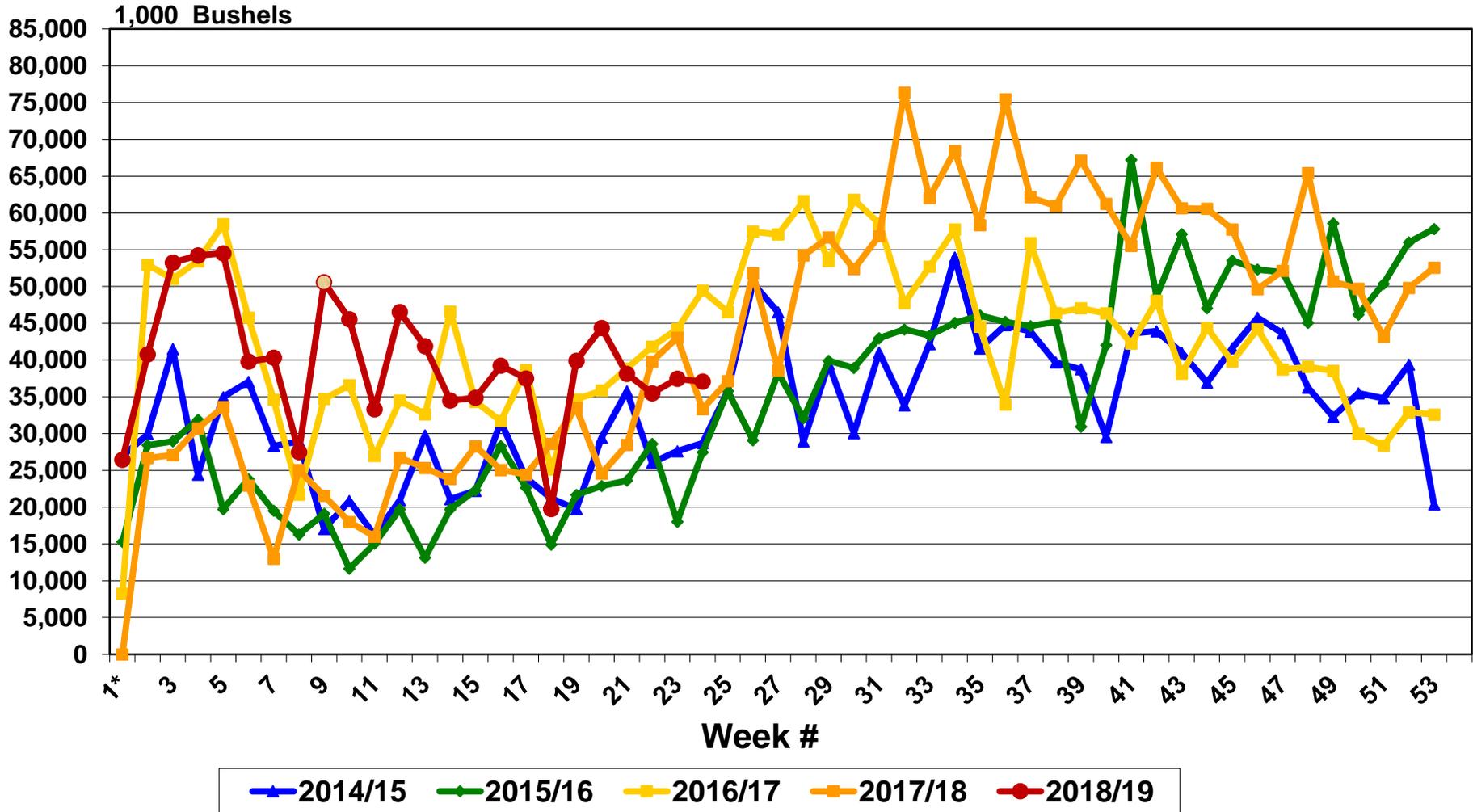


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# U.S. Corn Export Inspections

2018/19 exports are +54% versus the year ago, but once Argentine and Brazilian crops are harvested this spring/summer U.S. exports are expected to slow



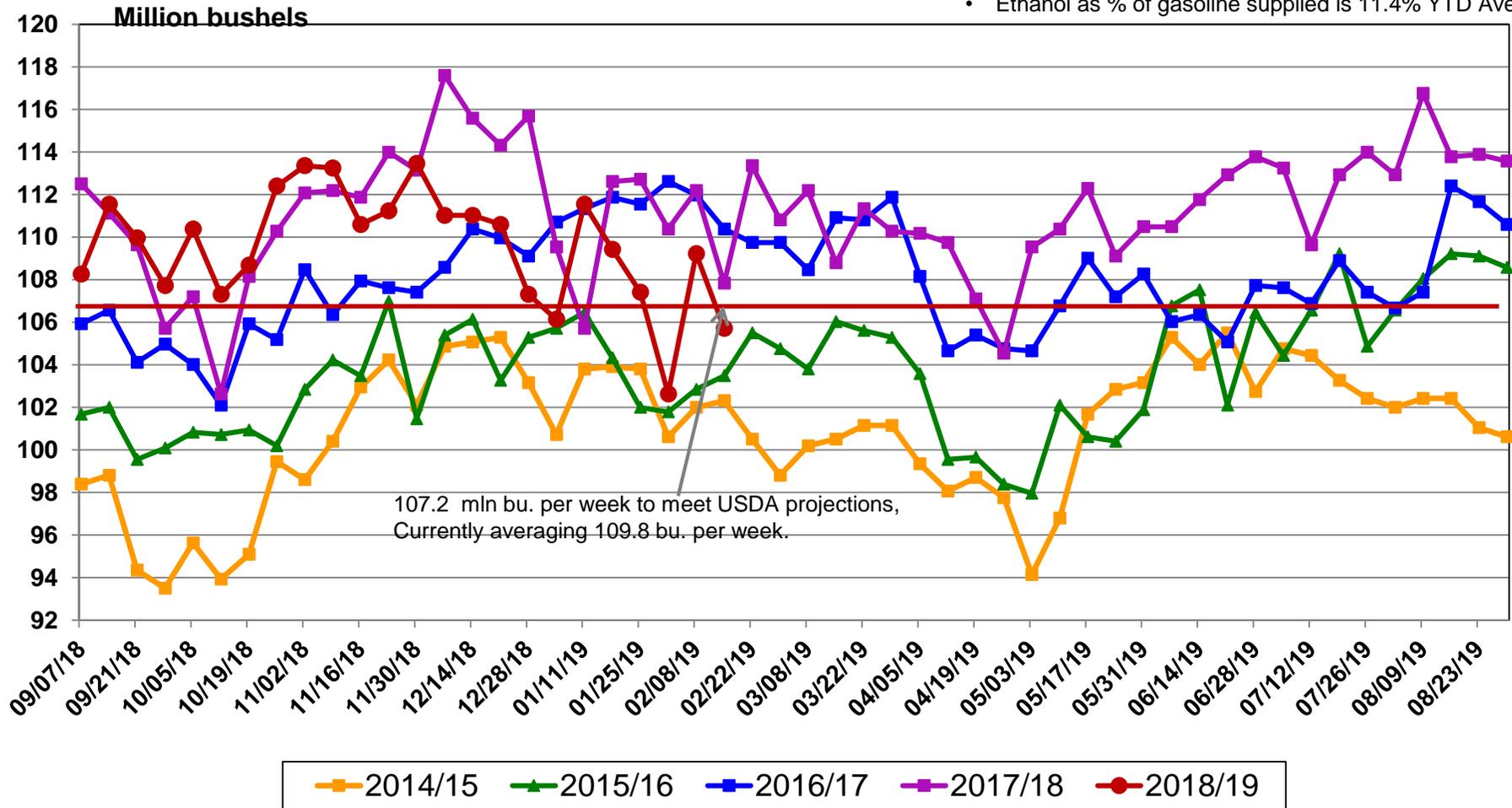
Source: USDA/AMS, Rabobank 2019

# Weekly Corn Usage for Ethanol Production

2018/19 ethanol production & corn usage are down -1.3% versus last year

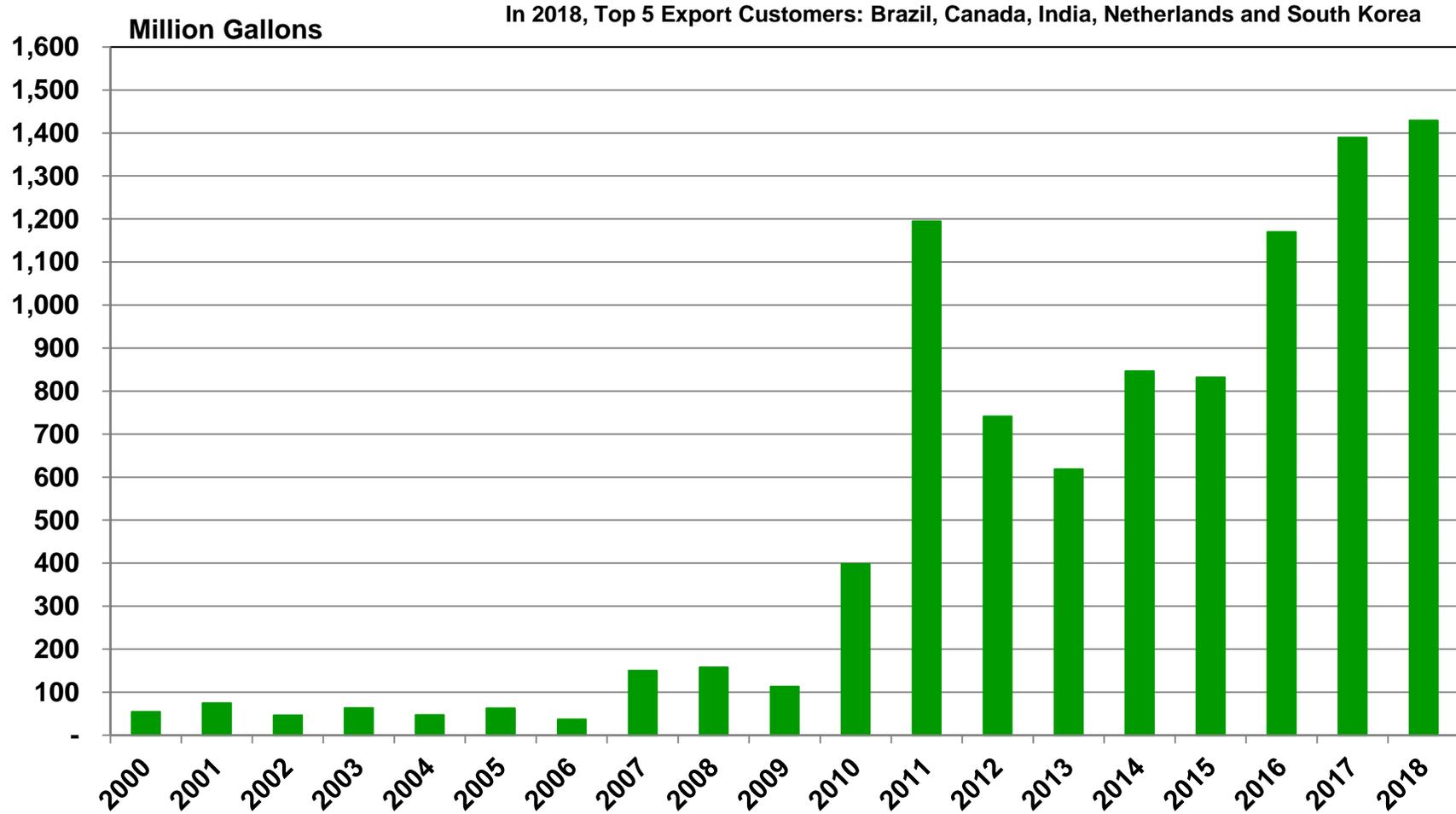


- Gasoline supplied is down 4.5% versus a year ago.
- Ethanol as % of gasoline supplied is 11.4% YTD Average



# U.S. Ethanol Exports continue to be strong

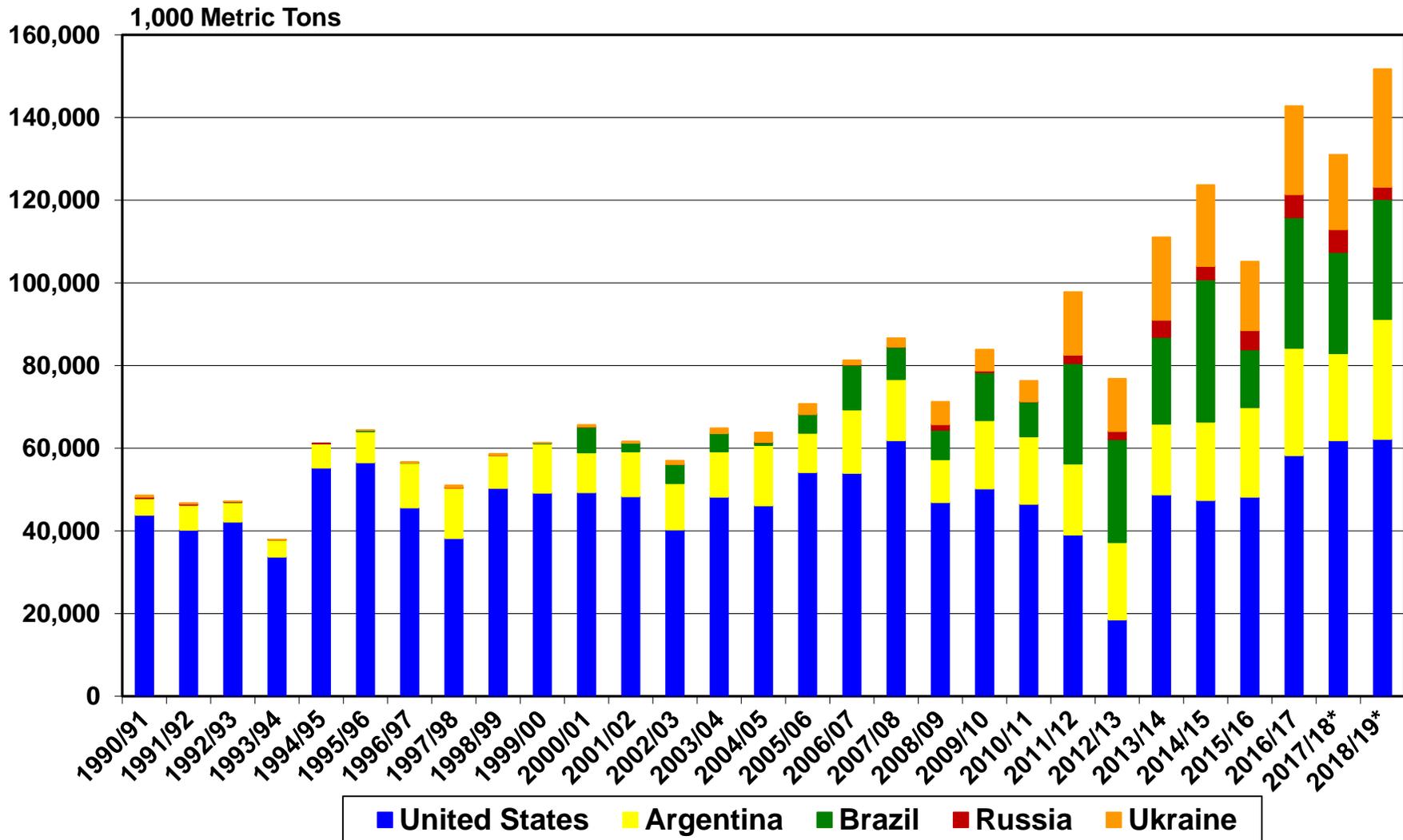
YTD 2018 U.S. ethanol exports for Jan-Nov are 30% ahead of last year



Source: USDA/FAS, Rabobank 2010  
\*2018 is through Nov.

# Global Corn Export Competition continues to grow

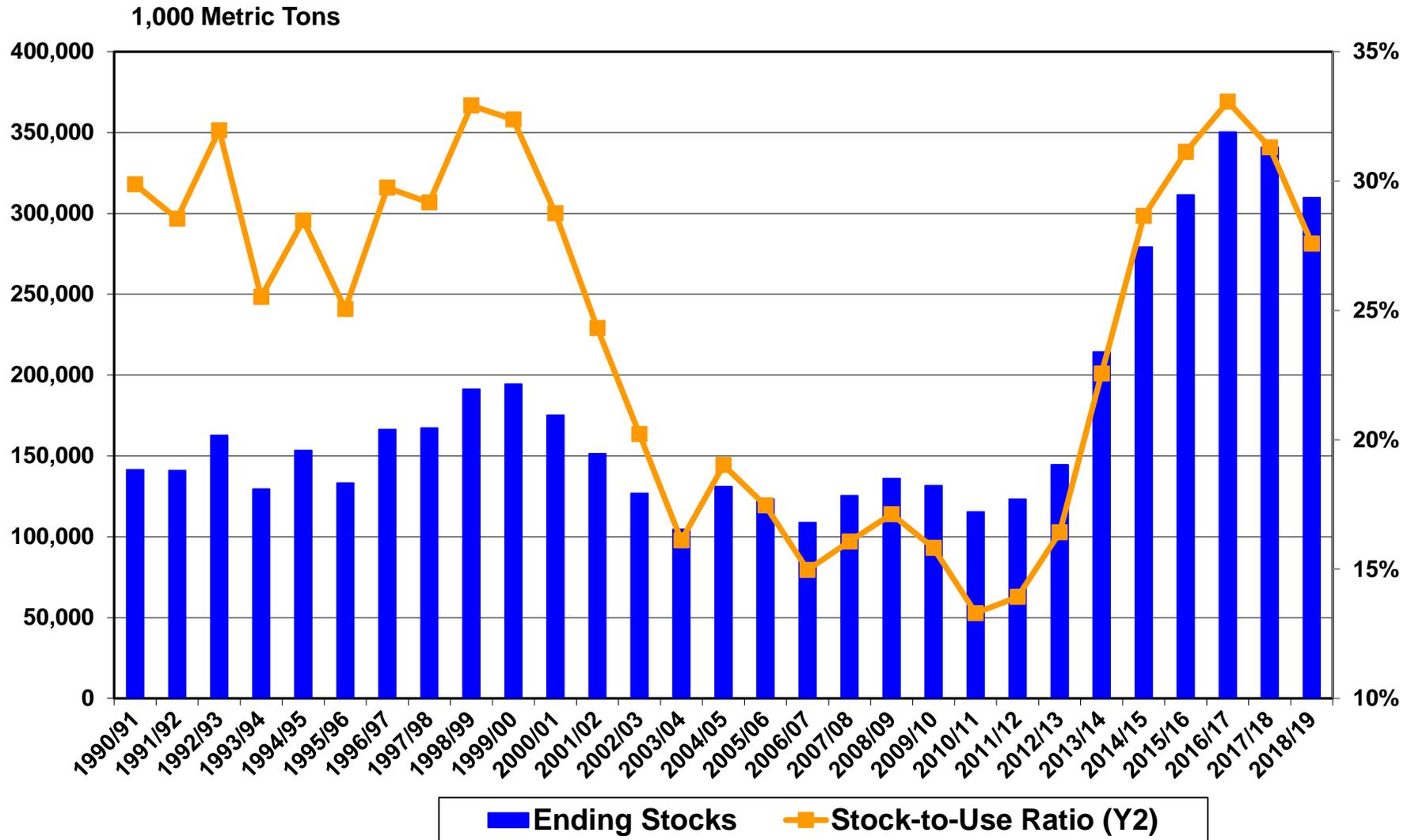
## U.S. corn exports remain flat, as competitors' exports grow



Source: USDA/FAS, Rabobank 2019

# Global Corn Stocks Down for 2nd Consecutive Year

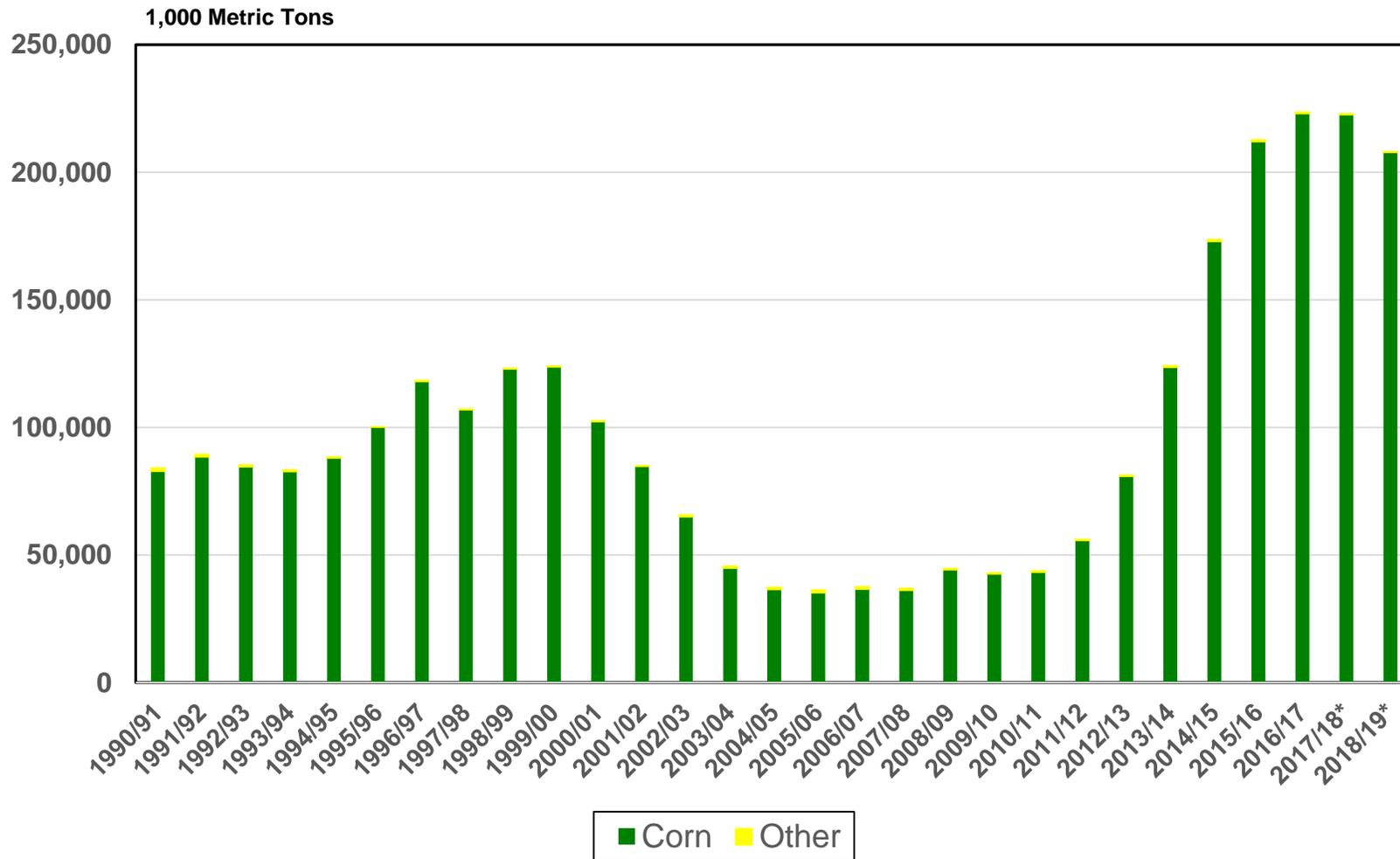
## Still 4<sup>th</sup> highest stocks and a stock-to-use ratio in upper quartile



Source: USDA/FAS, Rabobank 2019

# Major Revision in Chinese Corn Stocks

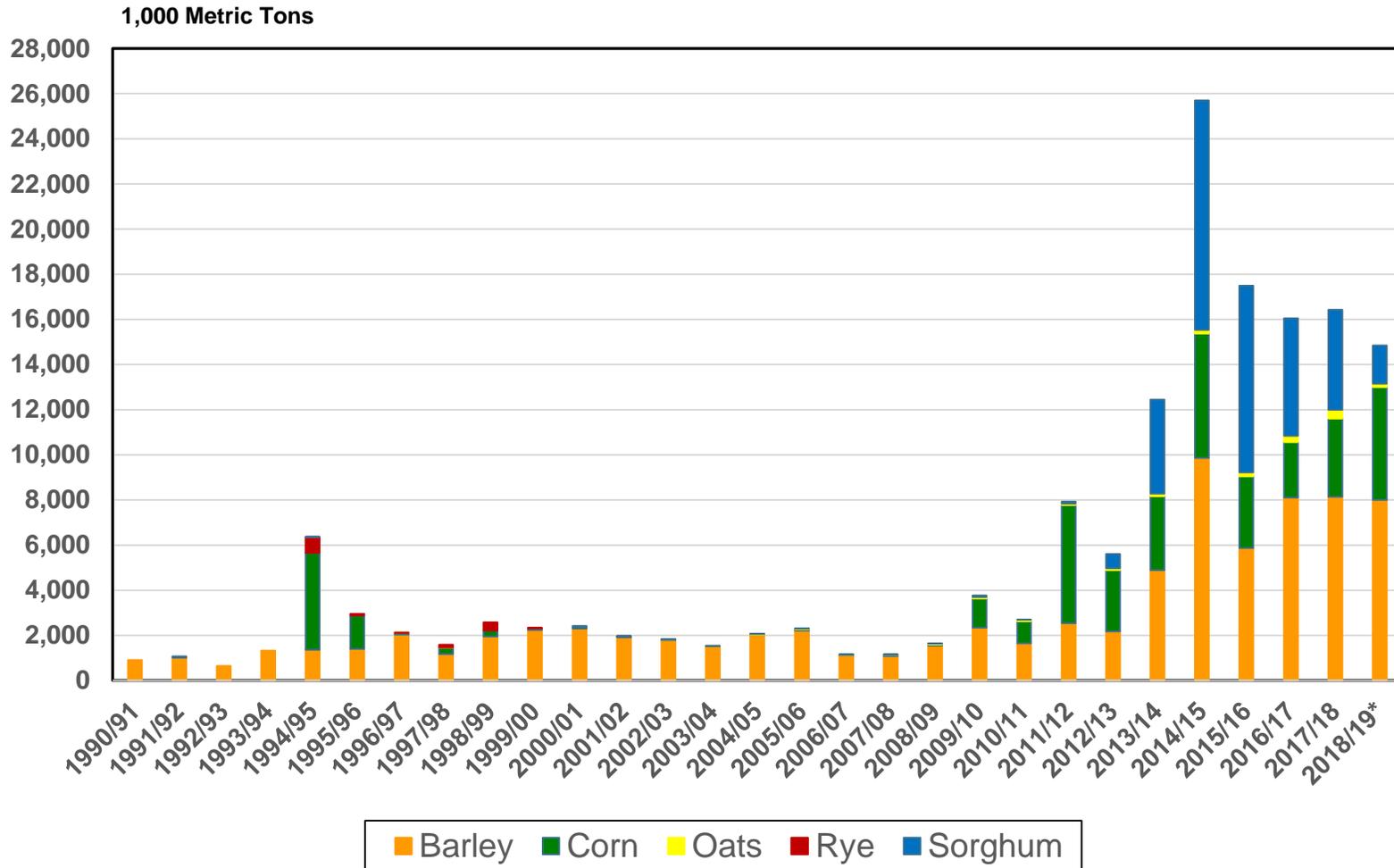
Doubling of previous stocks data—Chinese data has corn stocks higher yet.



Note: Other category includes barley, sorghum, millet, oats  
Source: USDA-FAS, Rabobank 2019

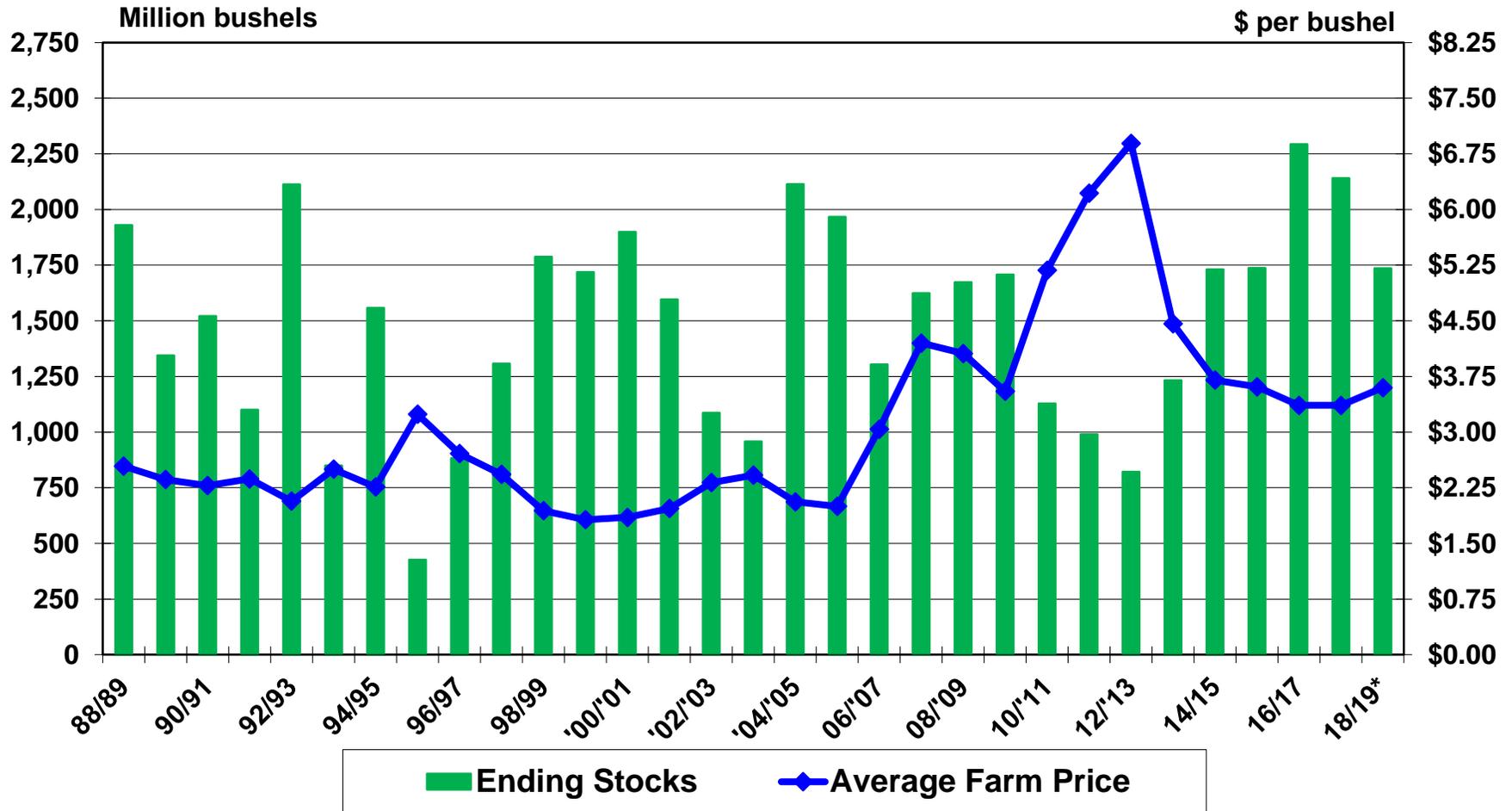
# Chinese Corn Import Increasing Slightly...

## ...stocks revision points to less imports required—total imports flat



Note: Other include barley, sorghum, millet, oats  
 Source: USDA-FAS, Rabobank 2018

# US Corn Ending Stocks Remain Healthy



\* Rabobank Projection



### III. Soybeans



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# Soybeans--Bulls and Bears

## ***Bullish Factors***

- Hog and poultry numbers
- Strong crush margins
- Demand for products, i.e. meal
- Biodiesel production
- Strong soybean meal export
- Increased EU soybean imports

## ***Bearish Factors***

- **Trade Tensions with China**
- **Record U.S. soybean stocks**
- Record global soybean stocks
- Return of South America in 2019

## ***Swing Factors***

- **Trade policies—moving from multi-lateral to tariff-based**
- **Chinese promises & purchases of U.S. soybeans**
- Strength of U.S. Dollar
- Brazilian soybean crop

# U.S. Soybean Balance Sheet (million bushels)

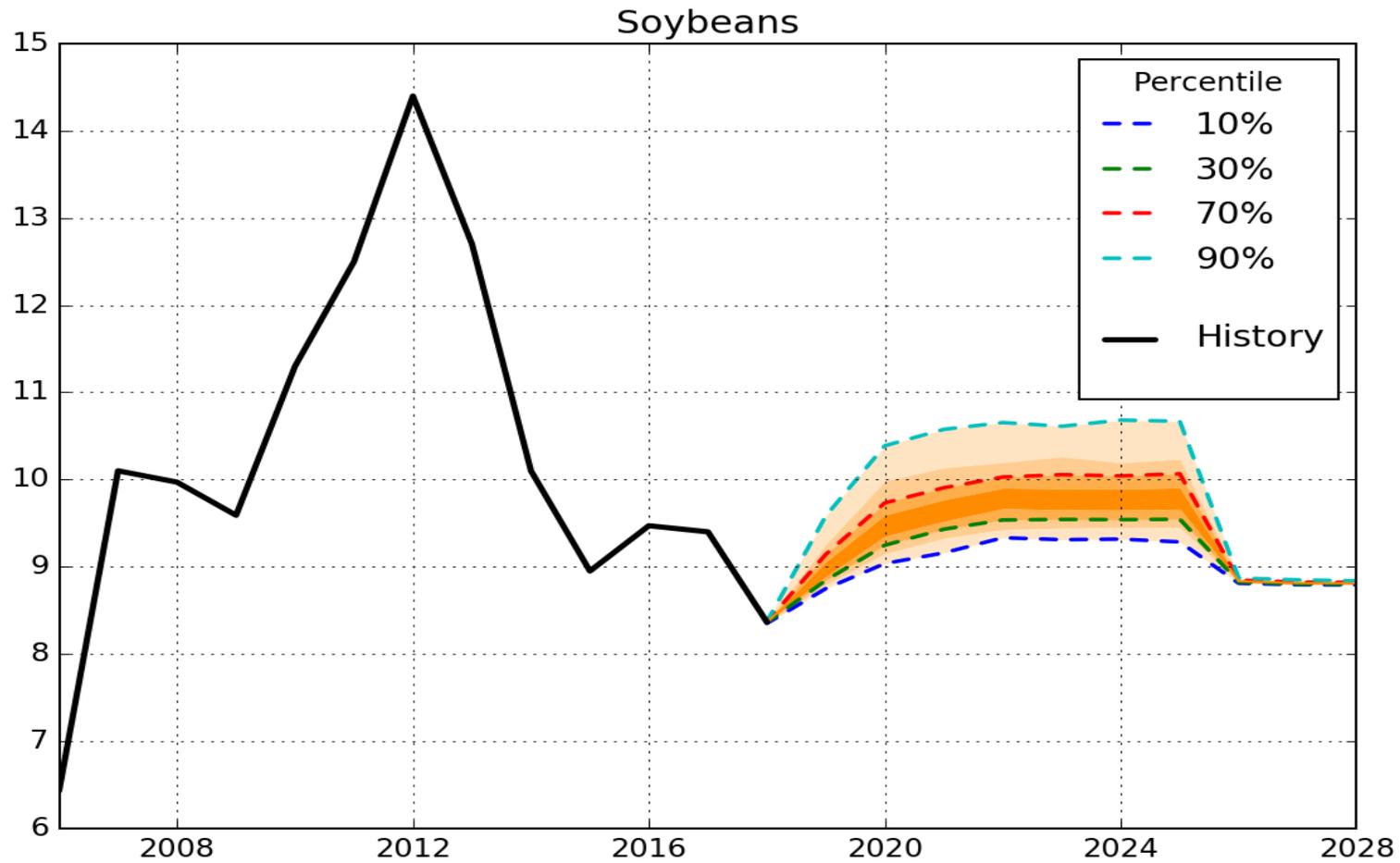


	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	USDA 2018/19*	Rabo 2019/20*
Planted Acres (mln)	75.0	77.2	76.8	83.3	82.7	83.5	90.2	89.2	85.0
Harvested Acres (mln)	73.8	76.1	76.3	82.6	81.7	82.7	89.5	88.1	84.1
Yield (bu./acre)	41.9	40.0	44.0	47.5	48.0	51.9	49.3	51.6	51.2
<b>Supply</b>									
Beginning Stocks (9/1)	215	169	141	92	191	197	302	439	886
Production	3,094	3,042	3,358	3,927	3,926	4,296	4,412	4,544	4,305
Imports	16	41	72	33	24	22	22	20	34
<b>Total Supply</b>	<b>3,325</b>	<b>3,252</b>	<b>3,570</b>	<b>4,052</b>	<b>4,141</b>	<b>4,516</b>	<b>4,735</b>	<b>5,002</b>	<b>5,225</b>
<b>Disappearance</b>									
Crush	1,703	1,689	1,734	1,873	1,886	1,901	2,055	2,090	2,092
Exports	1,365	1,317	1,638	1,842	1,942	2,166	2,129	1,875	2,366
Seed, Feed & Residual	88	105	107	146	115	147	113	127	131
<b>Total Disappearance</b>	<b>3,155</b>	<b>3,111</b>	<b>3,478</b>	<b>3,862</b>	<b>3,943</b>	<b>4,213</b>	<b>4,297</b>	<b>4,092</b>	<b>4,589</b>
Ending Stocks	169	141	92	191	197	302	438	910	636
Stocks-to-Use Ratio (%)	5.3%	4.5%	2.6%	4.9%	5.0%	7.2%	10.2%	22.2%	13.9%
Average Farm Price (\$/bu.)	\$12.50	\$14.40	\$13.00	\$10.10	\$8.95	\$9.47	\$9.33	\$8.60	\$8.90

\* Projections

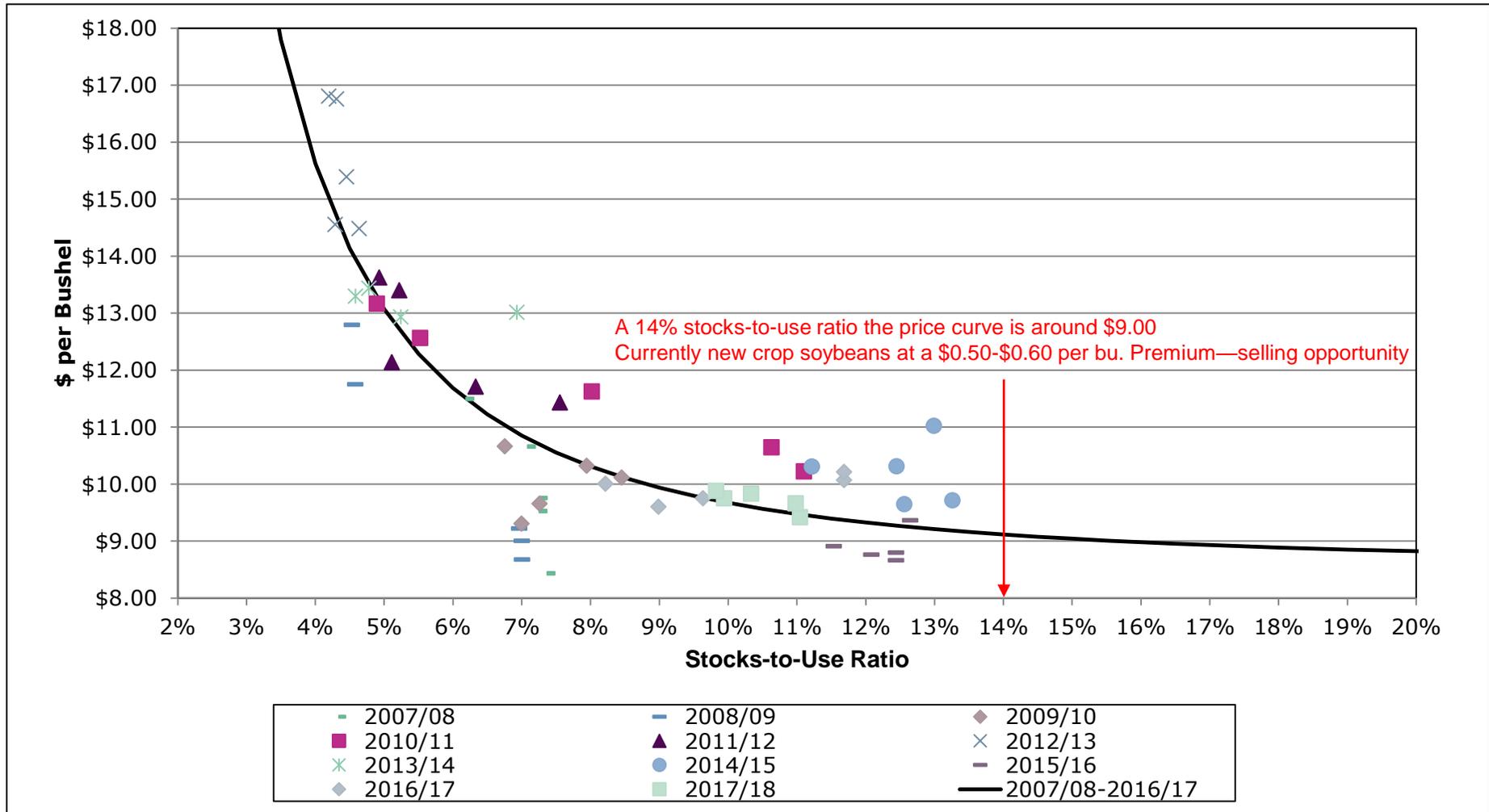
# National Average Farm Received Prices

70% probability that prices will be under \$10.00 per bushel



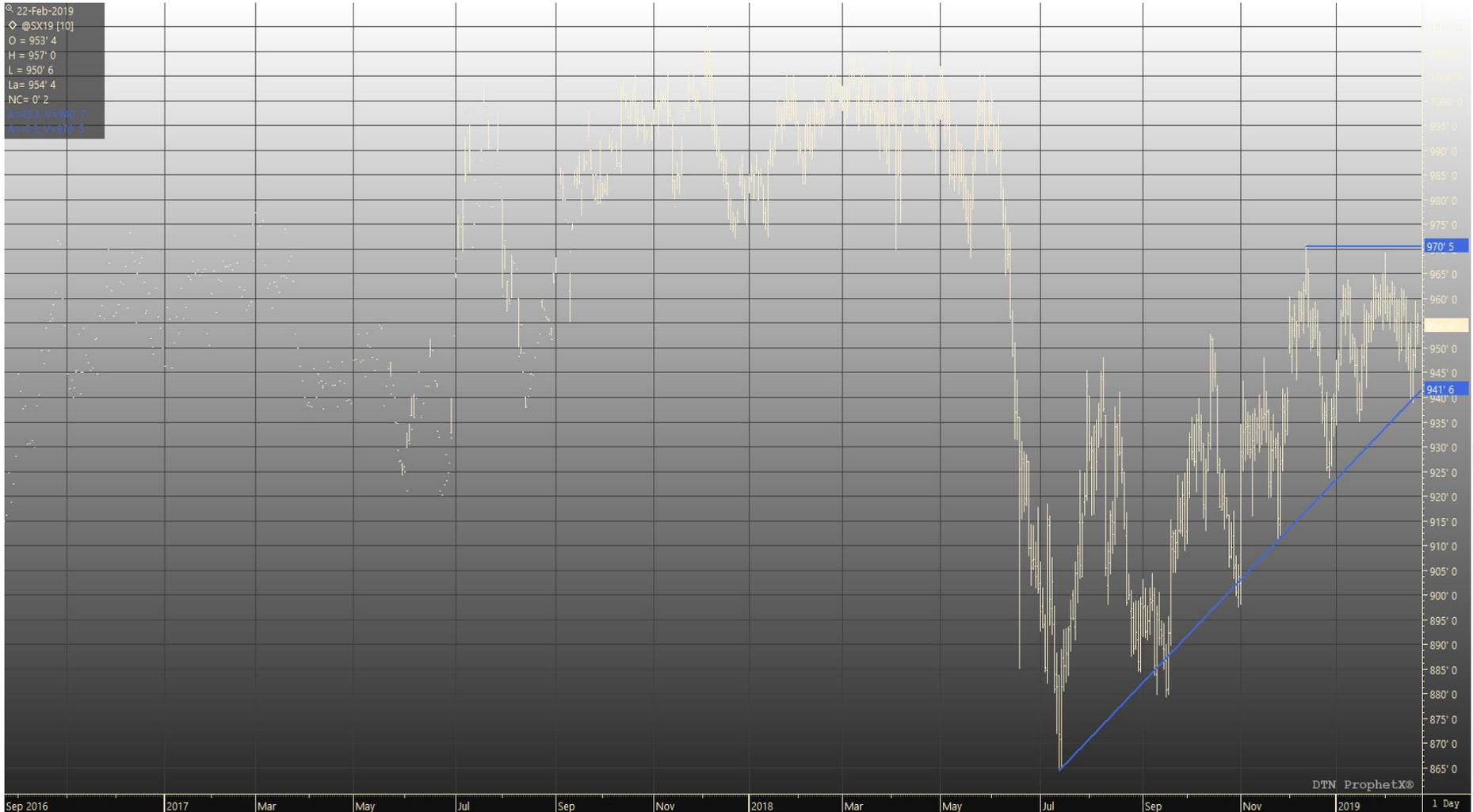
# U.S. Soybean Price Curve (Average for Q4 futures)

Soybean futures are trading where fundamentals suggest they should be



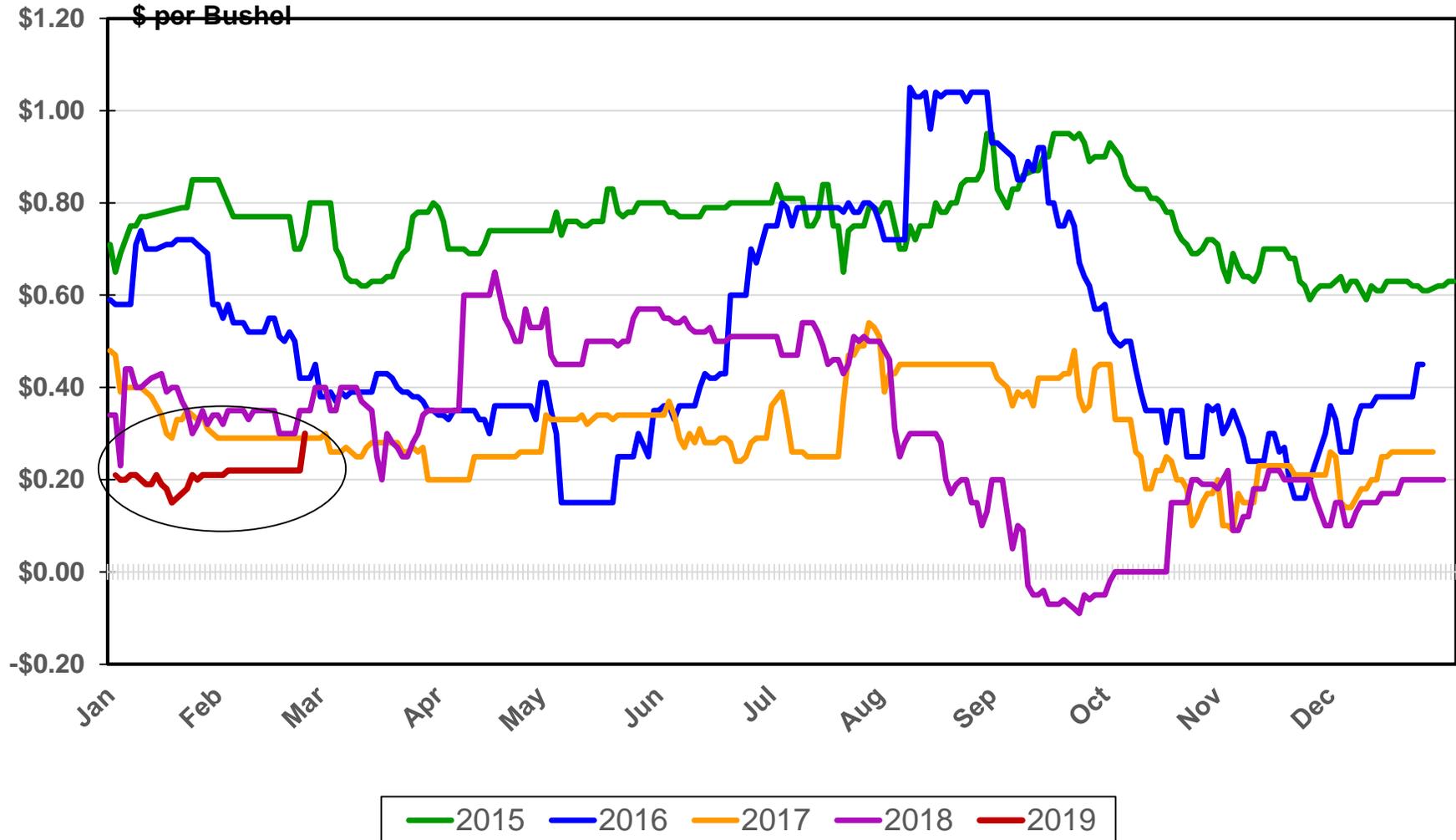
# Nov Soybean Futures (SX19)

## Upside resistance in \$9.70 area



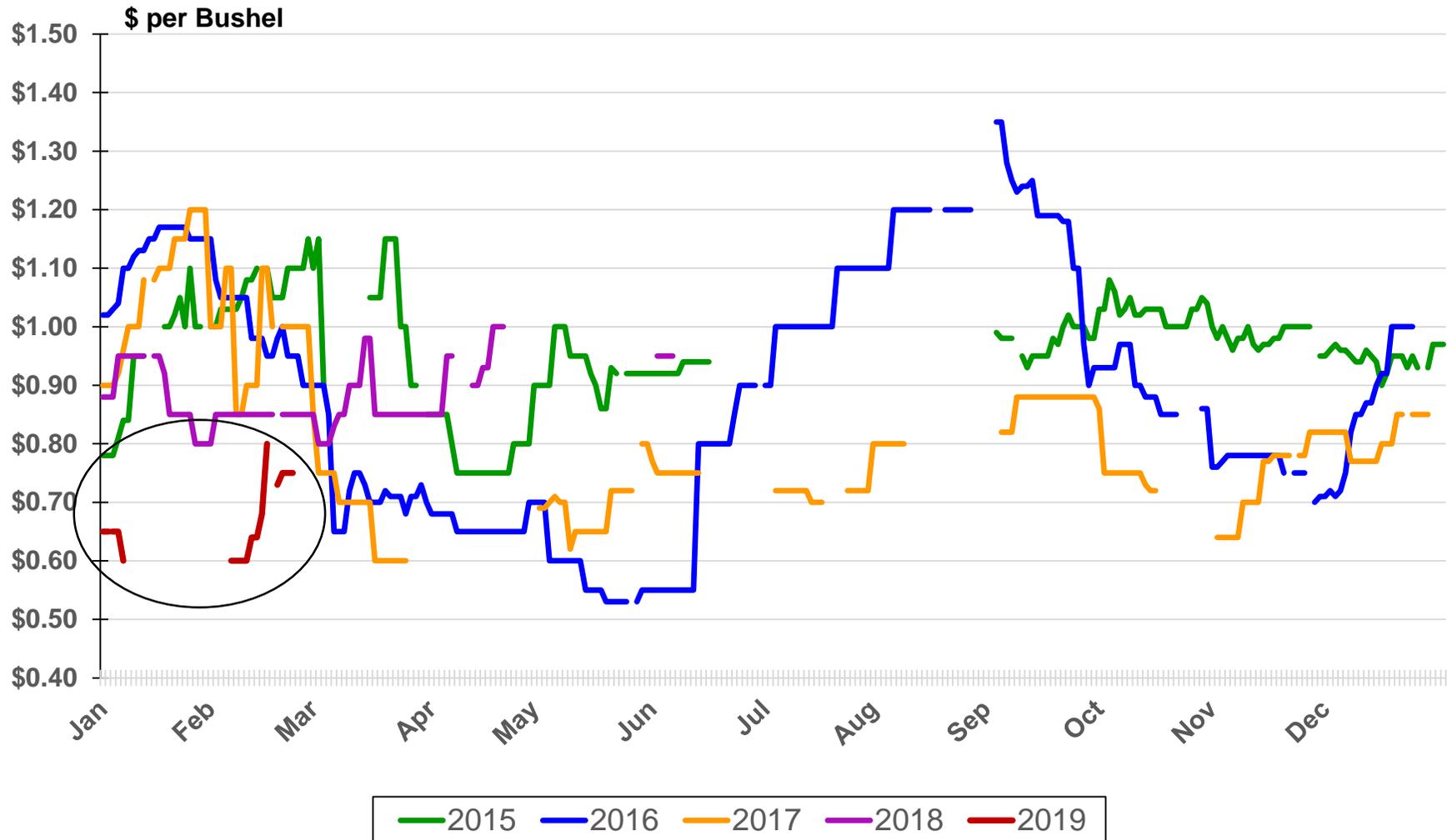
# Gulf CIF Soybean Basis Bid

Basis values has rebounded from harvest lows, but have little upside potential with tariffs still in place



# Portland-PNW Soybean Basis Bid

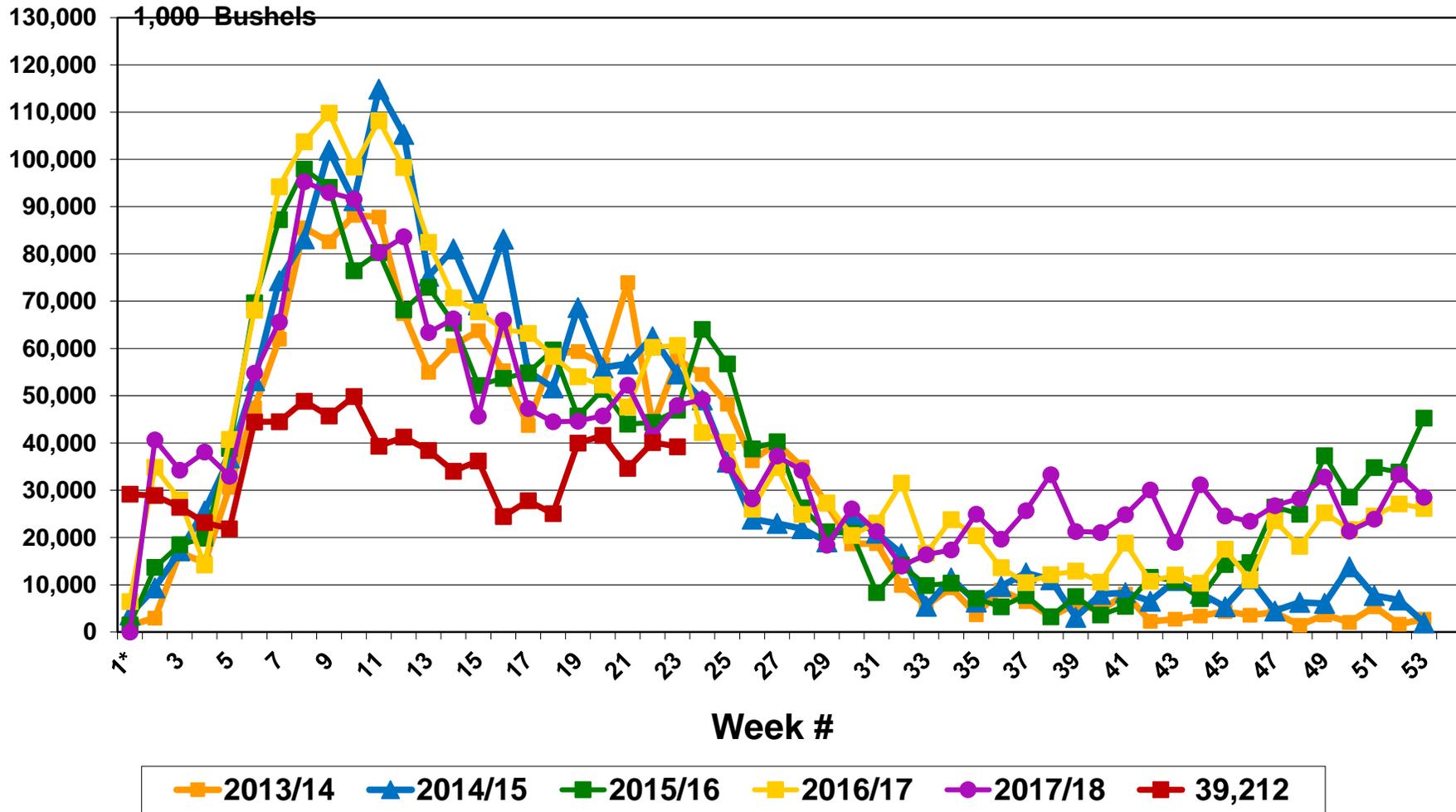
Appreciating basis bid an indicator of Asian buying, but still below previous years



# U.S. Soybean Export Inspections

2018/19 export pace is down 35.0% versus last crop year

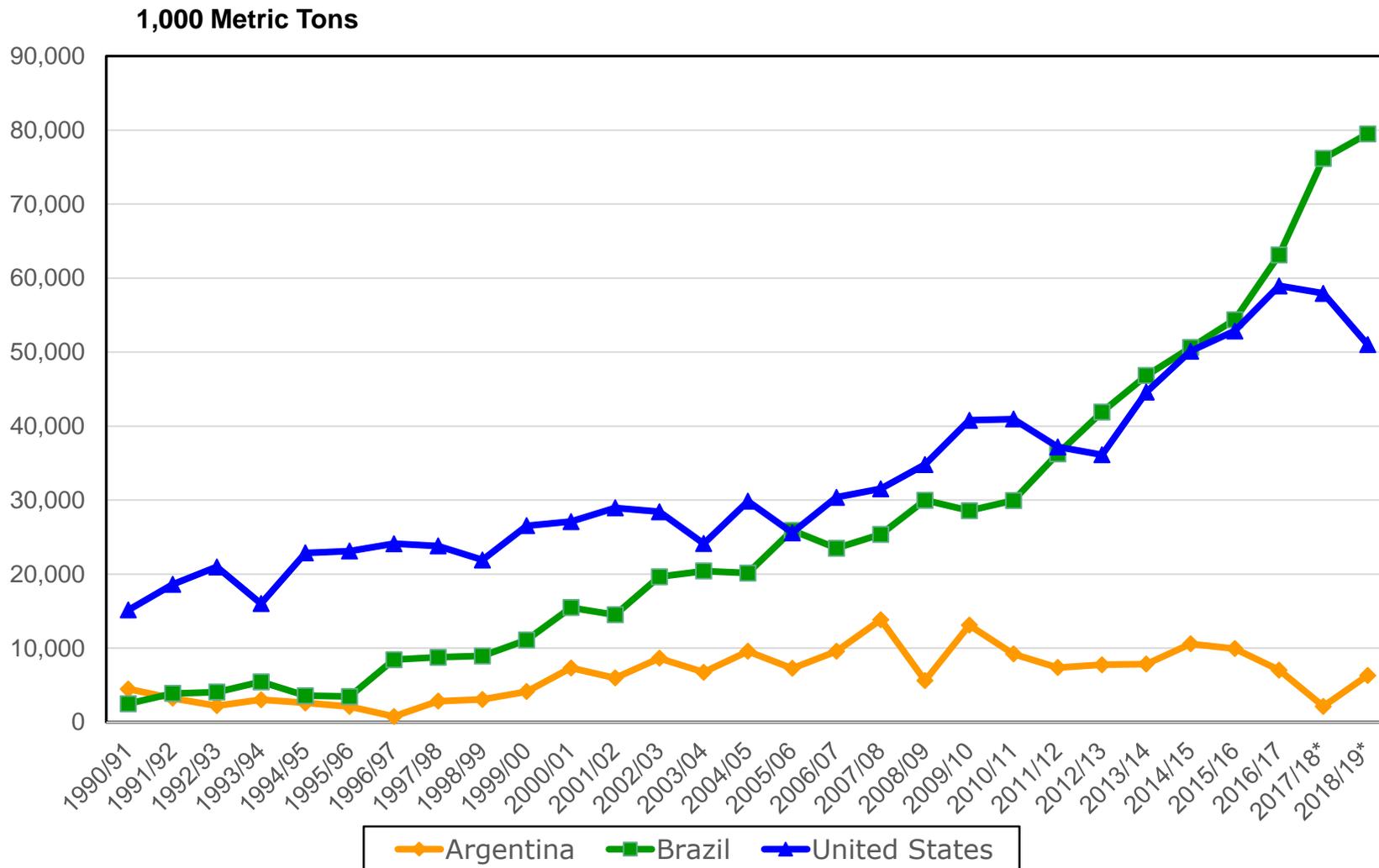
South American countries are importing U.S. soybeans, but will stop soon.



Source: USDA/AMS, Rabobank 2019



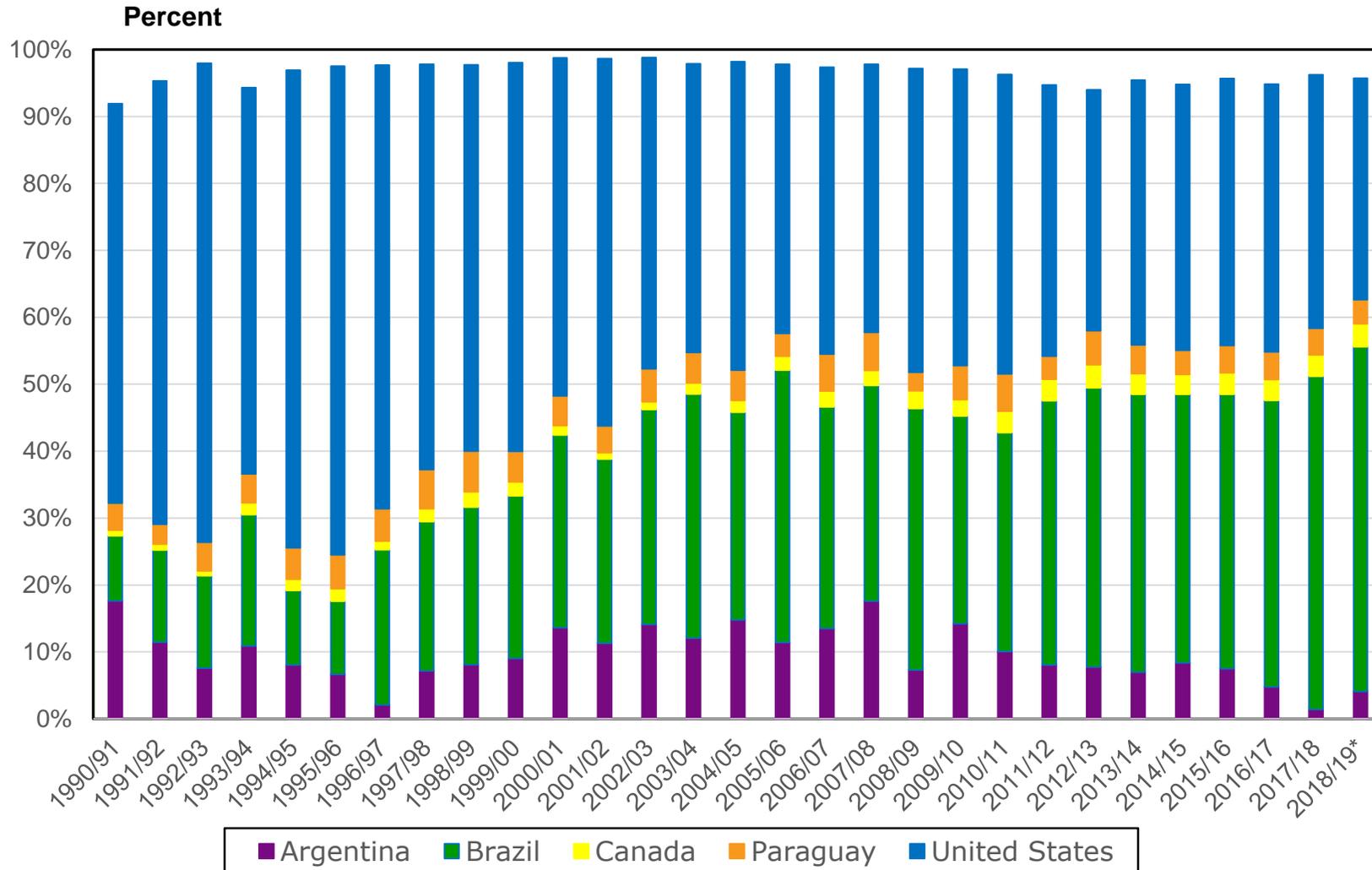
# Brazil and U.S. Soybean Export Trend is Diverging



Source: USDA, Rabobank 2019

# Brazil Has Taken Export Market Share Away from the U.S.

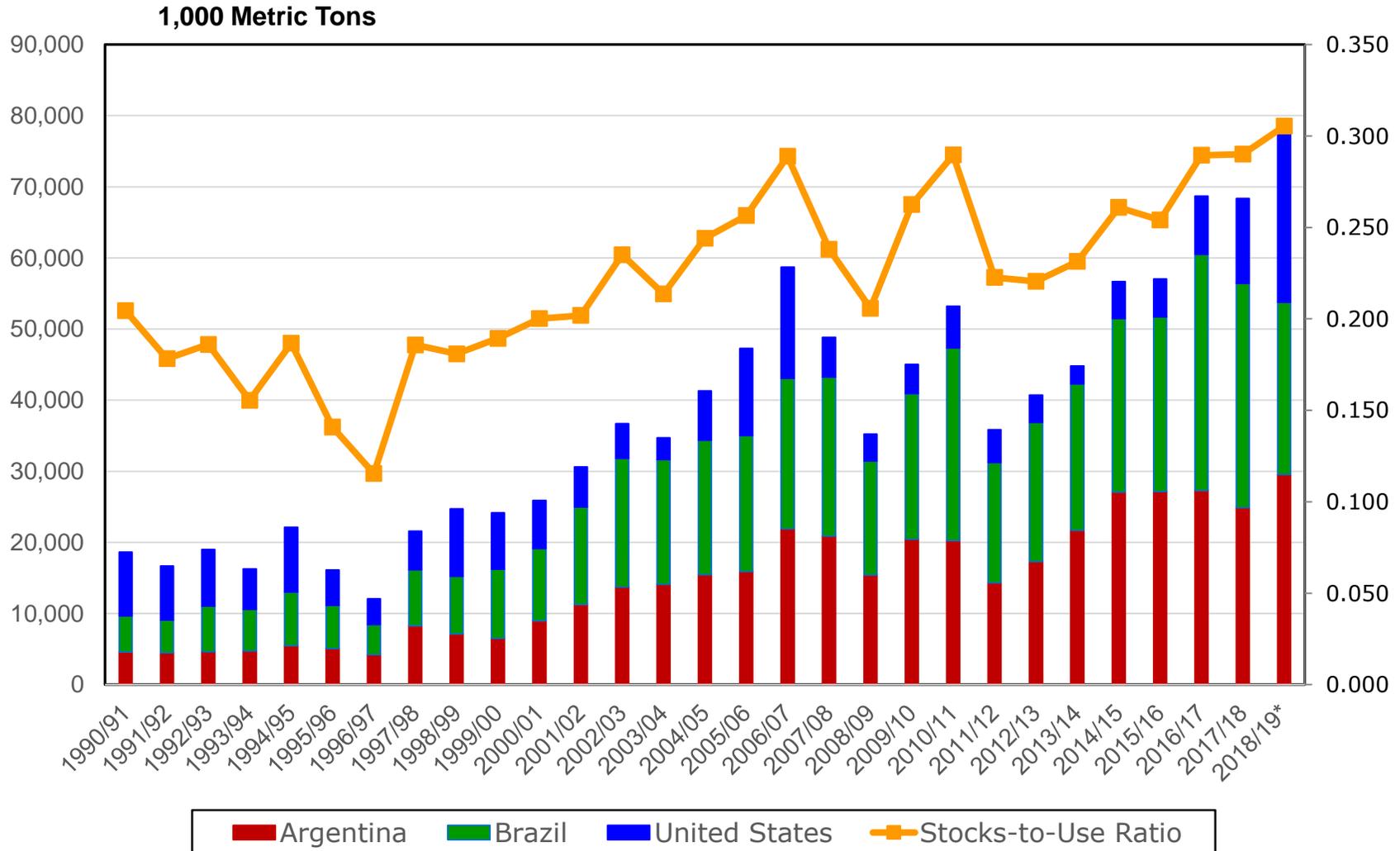
U.S. (33%) continues to lose market share to Brazil (52%)—trade tensions is likely to increase Brazil’s market share more rapidly, but there will be a limit.



Source: USDA, Rabobank 2019

# Record Global Soybean Stocks and Stocks-to-Use Ratio

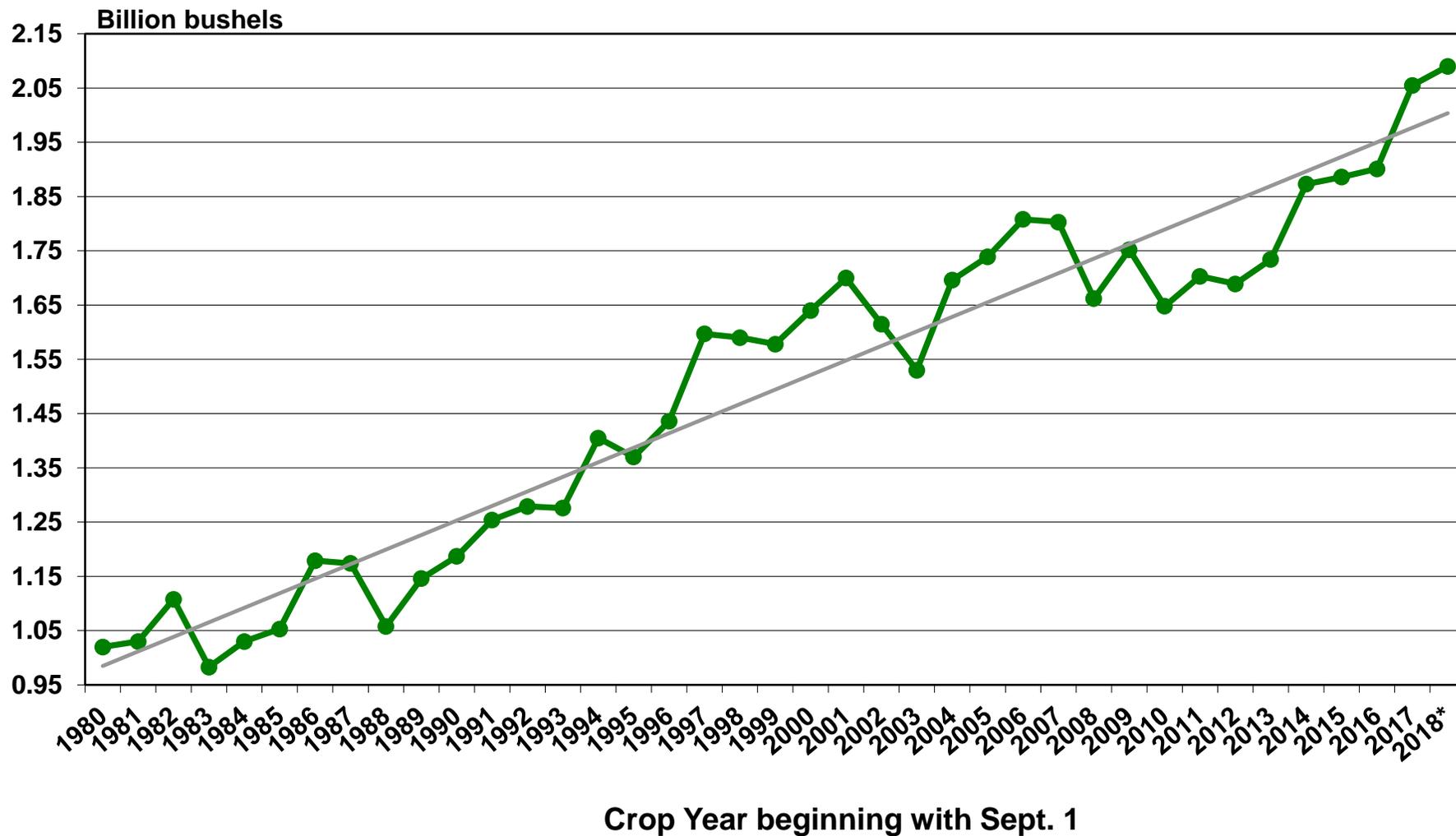
This is all despite a lower than expected Brazilian crop of 117 MMT



Source: USDA, Rabobank 2019



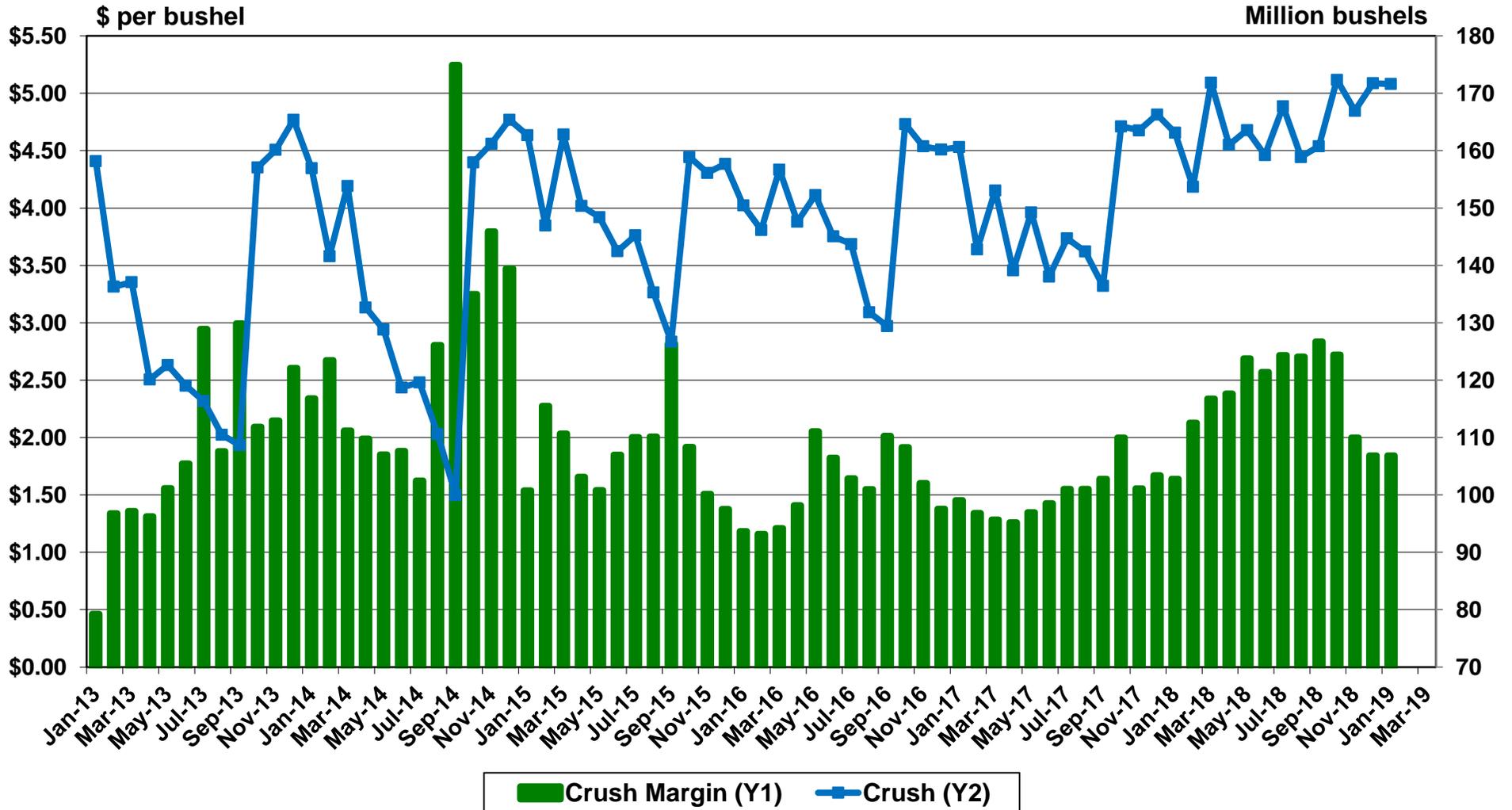
# U.S. Soybean Crush—Topping 2.0 bln bushels



\* Rabobank Projection

# U.S. Crush Margins Are Strong

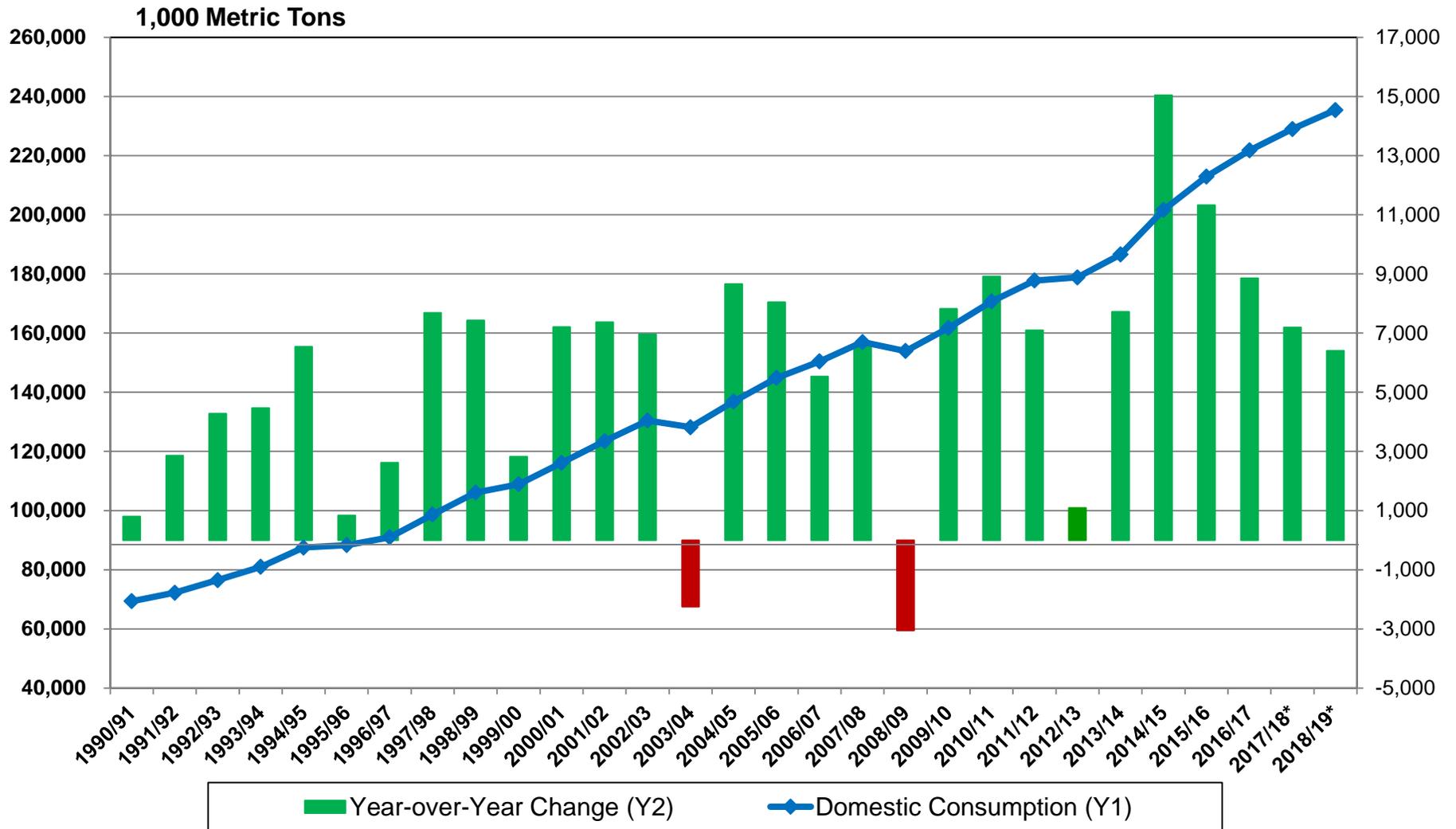
Strong crush margins will keep soybean demand up and crushers crushing



Source: NOPA, Rabobank 2018

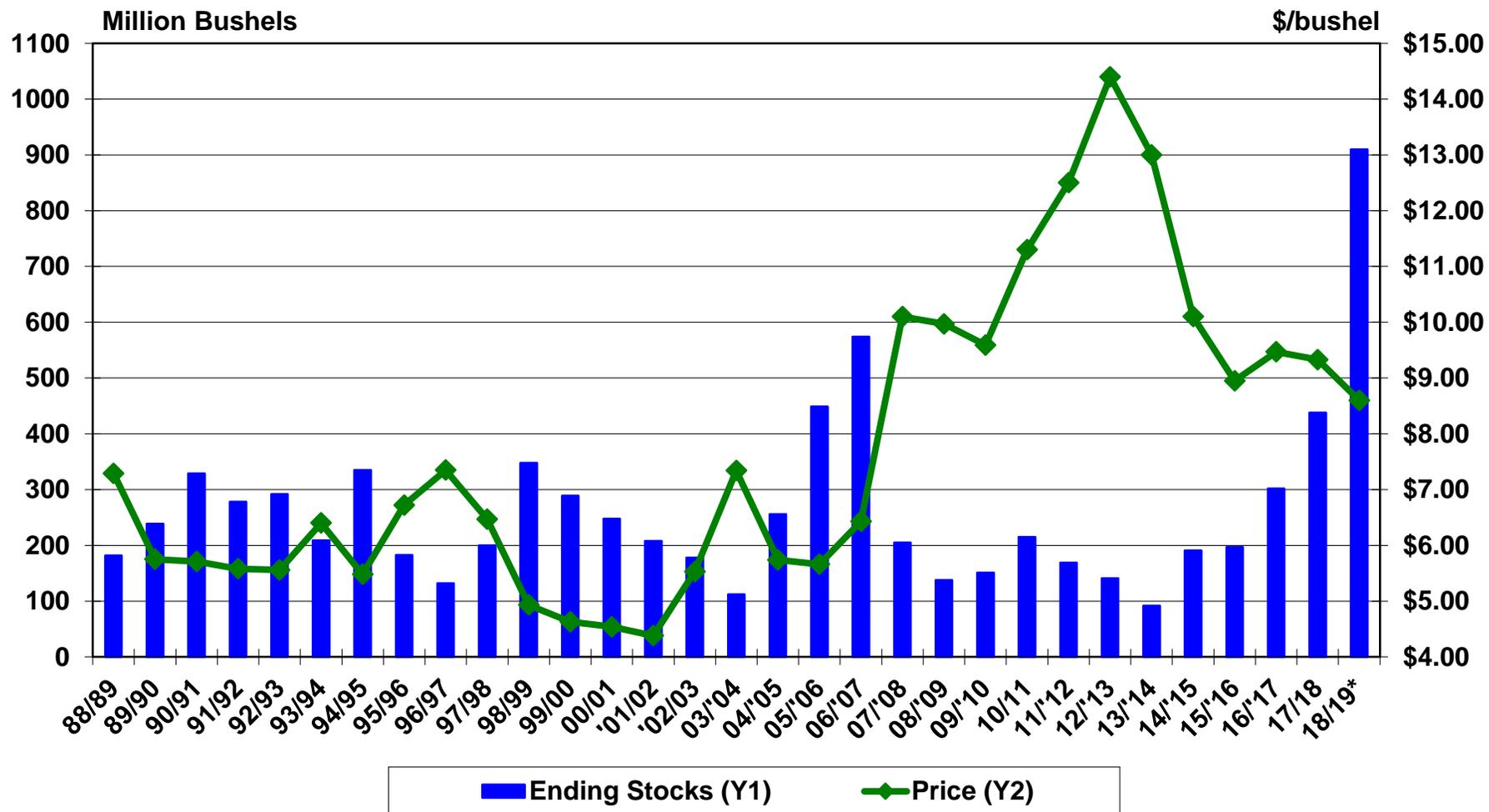
# Global Soybean Meal Domestic Consumption Continues to Increase

## African Swine Fever may change this trajectory—seeing slow down in growth





# Record U.S. Soybean Ending Stocks



\*Rabobank Projection



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## IV. Vegetable Oils



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# Vegetable Oil--Bulls and Bears

## ***Bullish Factor***

- Strong biodiesel production—crop year-to-date +5.0% vs last crop year
- Global vegetable oil stocks and stocks-to-use down
- Funds investing in soybean oil
- Strong U.S. soybean oil exports
- Increasing global biodiesel blends

## ***Bearish Factors***

- Record Malaysian palm oil stocks
- Building U.S. soybean oil stocks
- Increasing available of competitive vegetable oils, e.g. canola oil
- Strong crush have keep supplies plentiful
- Increasing supplies out of Argentina in 2019

## ***Swing Factors***

- Crude oil prices
- 2019 Argentine soybean and product production
- Global and domestic soybean meal demand
- Palm oil plantations replanting in next several years

# U.S. Soybean Oil Balance Sheet (million pounds)

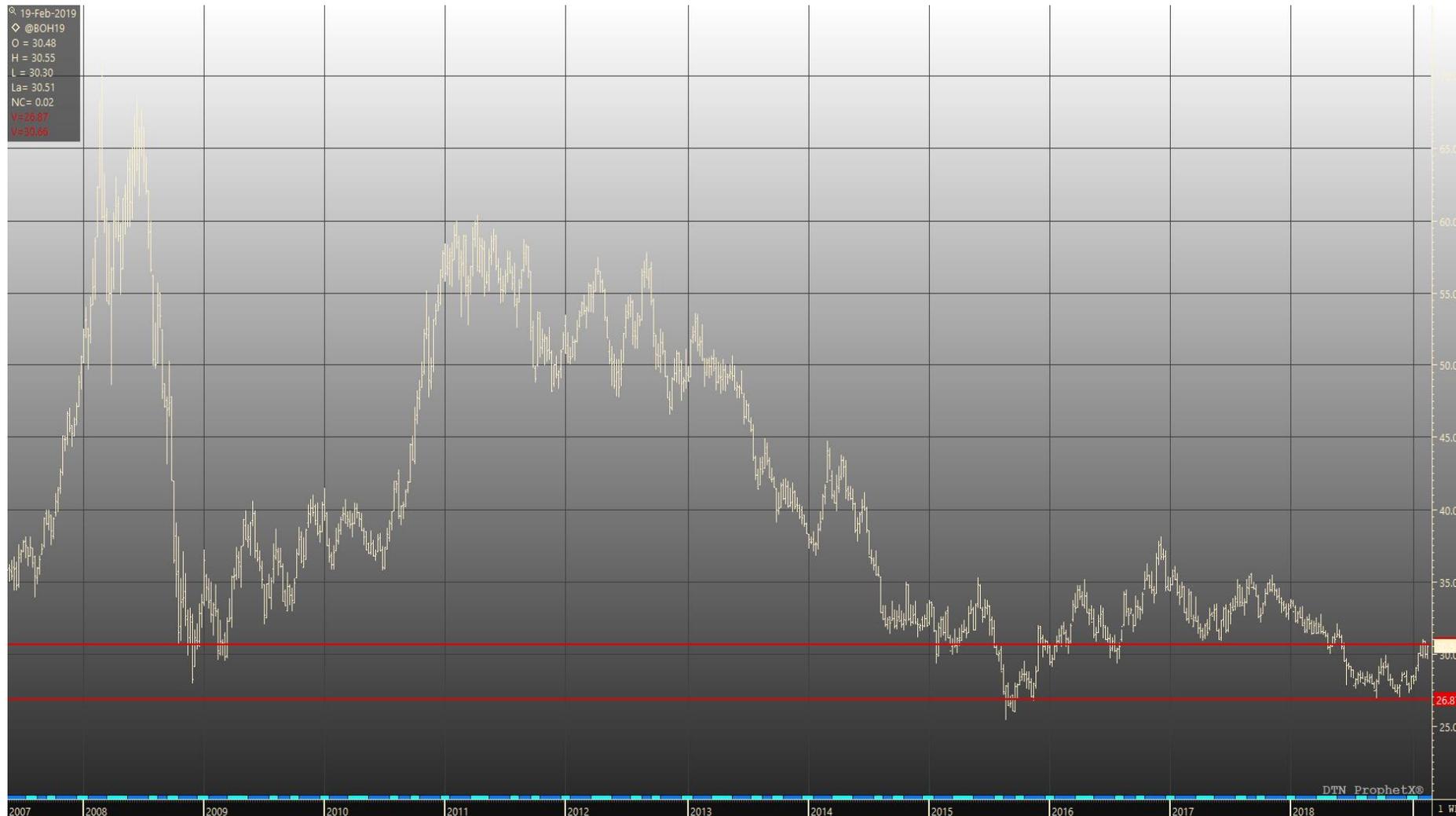
	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	USDA 2018/19
<b>Supply</b>								
Beginning Stocks (10/1)	2,676	2,591	1,657	1,167	1,857	1,689	1,713	1,992
Production	19,740	19,820	20,130	21,399	21,950	22,123	23,767	24,455
<b>Total Supply</b>	<b>22,565</b>	<b>22,606</b>	<b>21,952</b>	<b>22,830</b>	<b>24,094</b>	<b>24,131</b>	<b>25,815</b>	<b>26,747</b>
<b>Disappearance</b>								
<b>Domestic Use</b>	<b>18,510</b>	<b>18,787</b>	<b>18,908</b>	<b>18,959</b>	<b>20,162</b>	<b>19,862</b>	<b>21,376</b>	<b>22,400</b>
<i>Biodiesel</i>	<i>4,874</i>	<i>4,689</i>	<i>5,010</i>	<i>5,039</i>	<i>5,670</i>	<i>6,200</i>	<i>7,134</i>	<i>8,000</i>
<b>Exports</b>	<b>1,464</b>	<b>2,163</b>	<b>1,877</b>	<b>2,014</b>	<b>2,243</b>	<b>2,556</b>	<b>2,447</b>	<b>2,250</b>
<b>Total Disappearance</b>	<b>19,974</b>	<b>20,949</b>	<b>20,785</b>	<b>20,973</b>	<b>22,405</b>	<b>22,418</b>	<b>23,823</b>	<b>24,650</b>
<b>Ending Stocks</b>	<b>2,591</b>	<b>1,657</b>	<b>1,167</b>	<b>1,857</b>	<b>1,689</b>	<b>1,713</b>	<b>1,992</b>	<b>2,097</b>
<b>Stocks-to-Use Ratio (%)</b>	<b>12.9%</b>	<b>7.9%</b>	<b>5.6%</b>	<b>8.9%</b>	<b>7.5%</b>	<b>7.6%</b>	<b>8.4%</b>	<b>8.5%</b>
<b>Price-Decatur (cents/lb.)</b>	<b>51.90</b>	<b>47.13</b>	<b>38.23</b>	<b>31.60</b>	<b>29.86</b>	<b>32.48</b>	<b>30.04</b>	<b>28.50- 33.50</b>
<b>Crush (mln bushels)</b>	<b>1,703</b>	<b>1,680</b>	<b>1,725</b>	<b>1,903</b>	<b>1,890</b>	<b>1,906</b>	<b>2,079</b>	<b>2,090</b>
<b>Yield (lbs. per bu.)</b>	<b>11.59</b>	<b>11.80</b>	<b>11.67</b>	<b>11.24</b>	<b>11.61</b>	<b>11.61</b>	<b>11.43</b>	<b>11.70</b>

# Weekly Soybean Oil Futures (cents per pound)

Futures run up against upside resistance around \$0.31

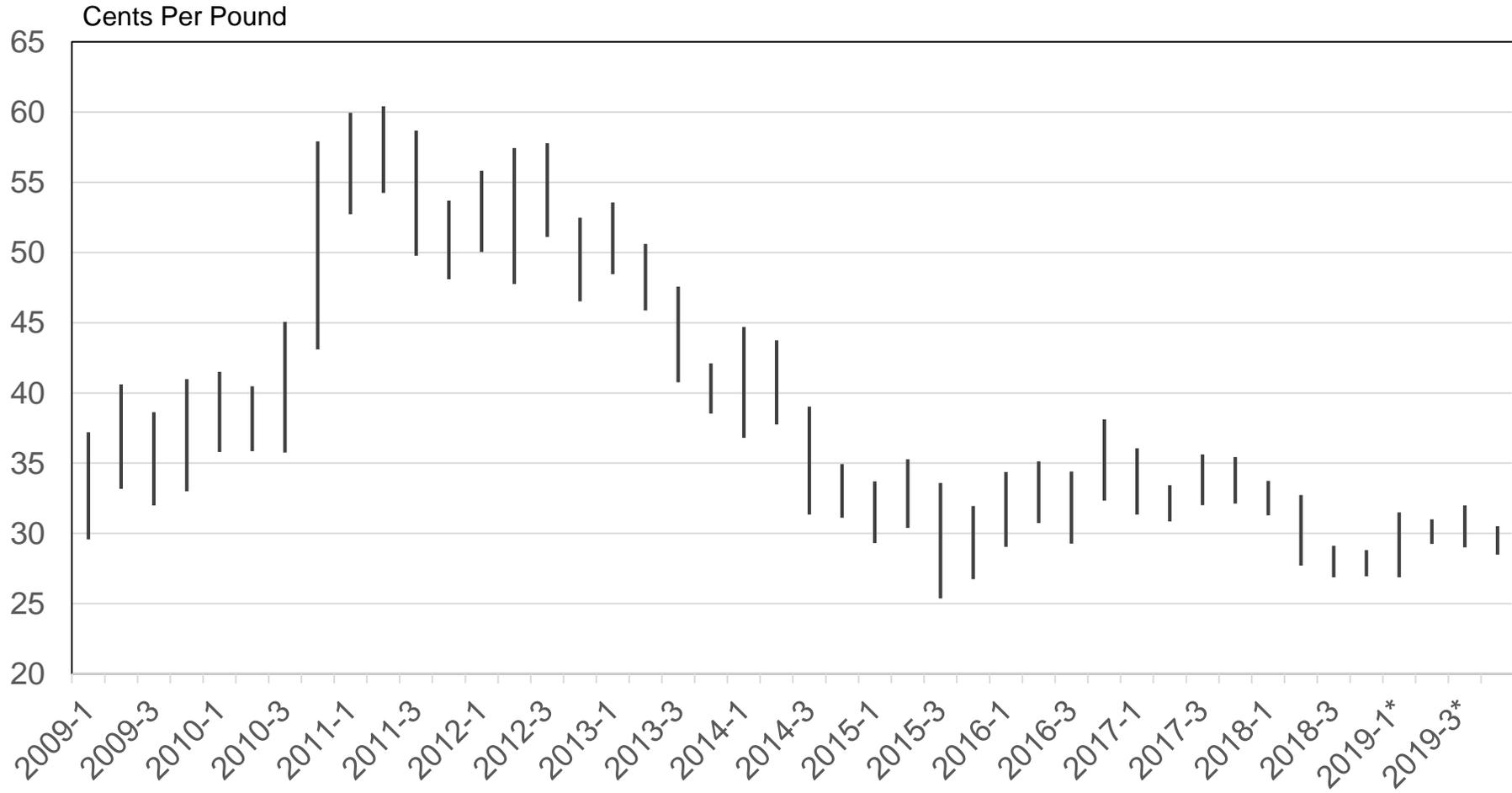


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# Nearby CBOT Futures Price Forecast for Soybean Oil

2019 futures are expected to remain in narrow trading range



# Nearby CBOT Futures Price Forecast for Soybean Oil (cents per pound)

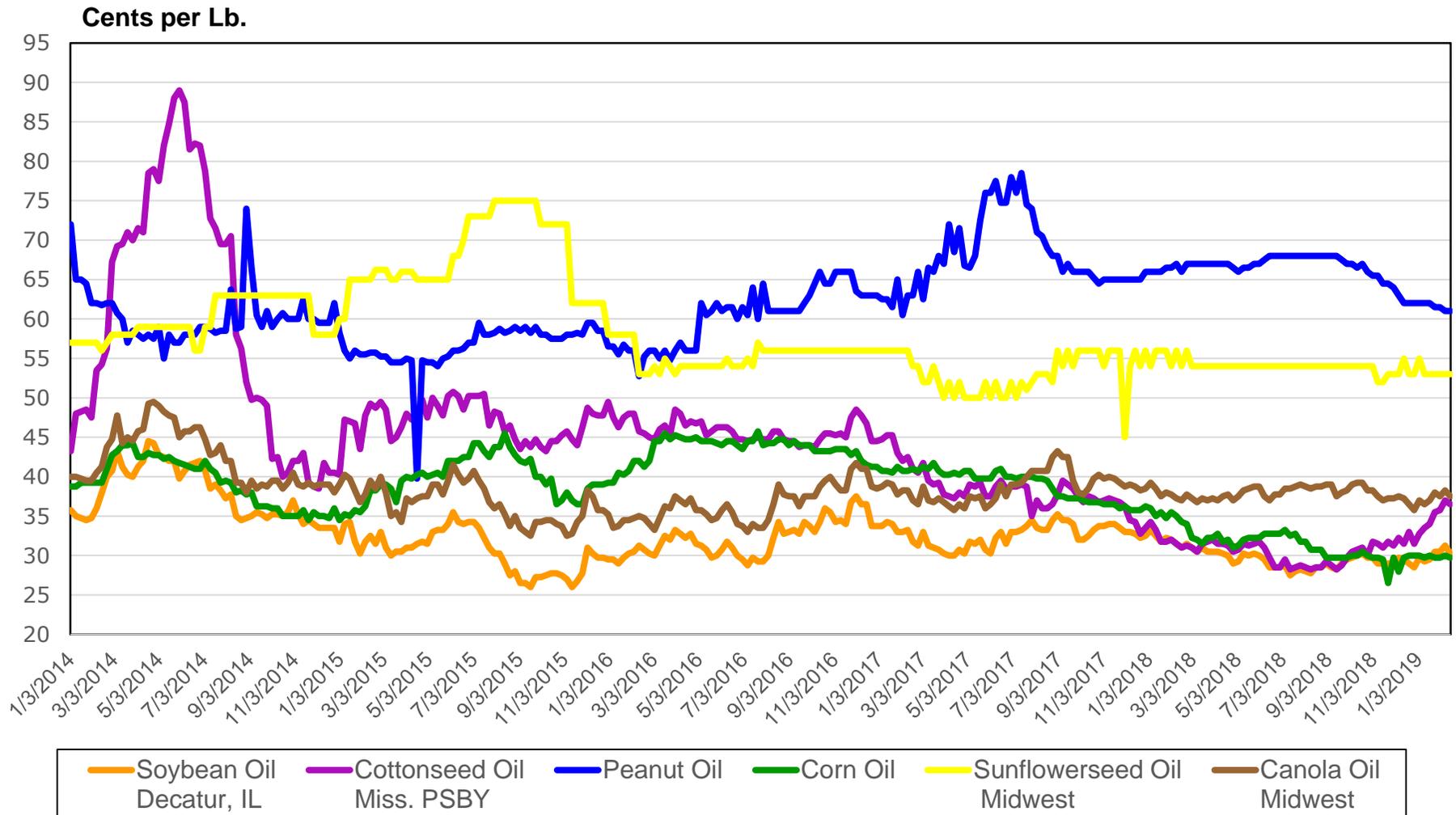


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Year	Jan-Feb-Mar	Apr-May-Jun	Jul-Aug-Sep	Oct-Nov-Dec
2011	\$52.73-\$59.96	\$54.25-\$60.41	\$49.77-\$58.68	\$48.11-\$53.70
2012	\$50.05-\$55.82	\$47.76-\$57.45	\$51.11-\$57.78	\$46.52-\$52.47
2013	\$48.46-\$53.57	\$45.88-\$50.61	\$40.76-\$47.57	\$38.54-\$42.12
2014	\$36.80-\$44.70	\$37.76-\$43.74	\$31.34-\$39.04	\$31.12-\$34.95
2015	\$29.32-\$33.71	\$30.39-\$35.29	\$25.38-\$33.60	\$26.74-\$31.96
2016	\$29.04-\$34.37	\$30.74-\$35.14	\$29.28-\$34.41	\$32.33-\$38.11
2017	\$31.35-\$36.07	\$30.86-\$33.44	\$32.01-\$35.60	\$32.12-\$35.44
2018	\$31.28-\$33.75	\$27.72-\$32.73	\$26.88-\$29.12	\$26.95-\$28.82
2019	\$26.88-\$31.50	\$29.25-\$31.00	\$29.00-\$32.00	\$28.50-\$30.50

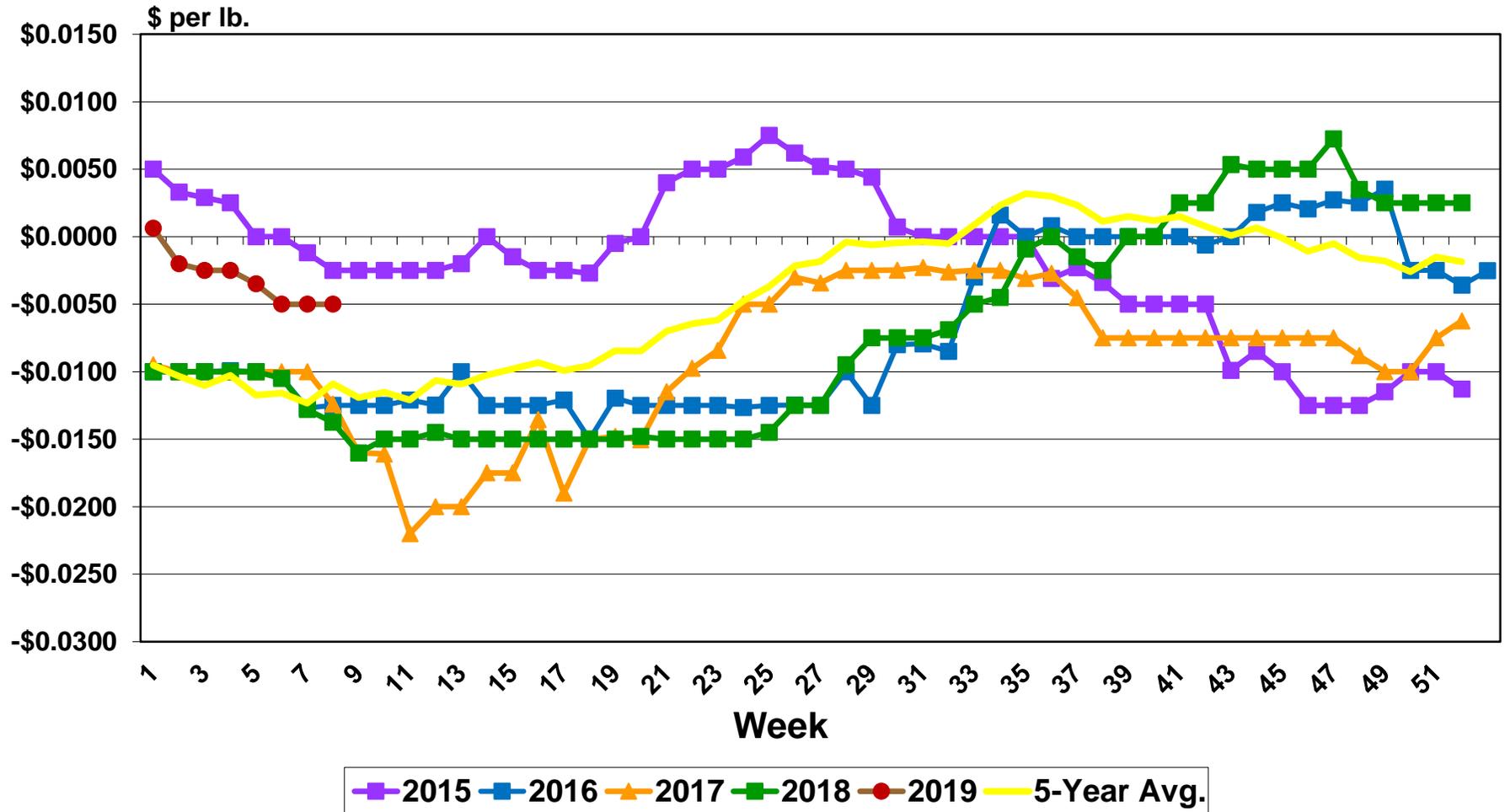
\*Shaded area indicates Projection

# U.S. Vegetable Oil Prices



# U.S. Soybean Oil Basis---Central Illinois

Basis values have been supported by higher freights costs



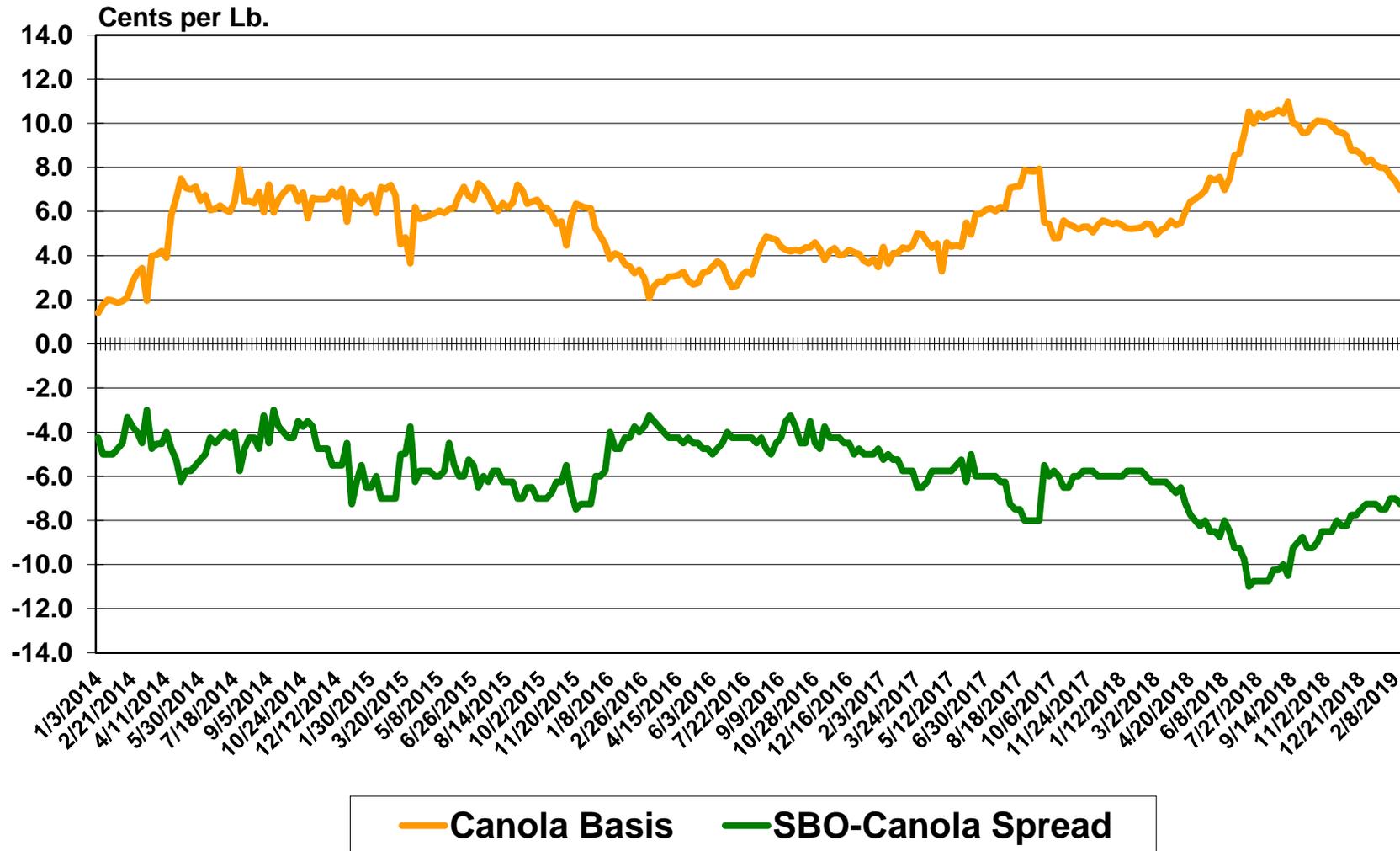
Source: Trade News Service, Rabobank 2019

# Canola Oil Basis and Premium to Soybean Oil

Canola oil basis values are attractive

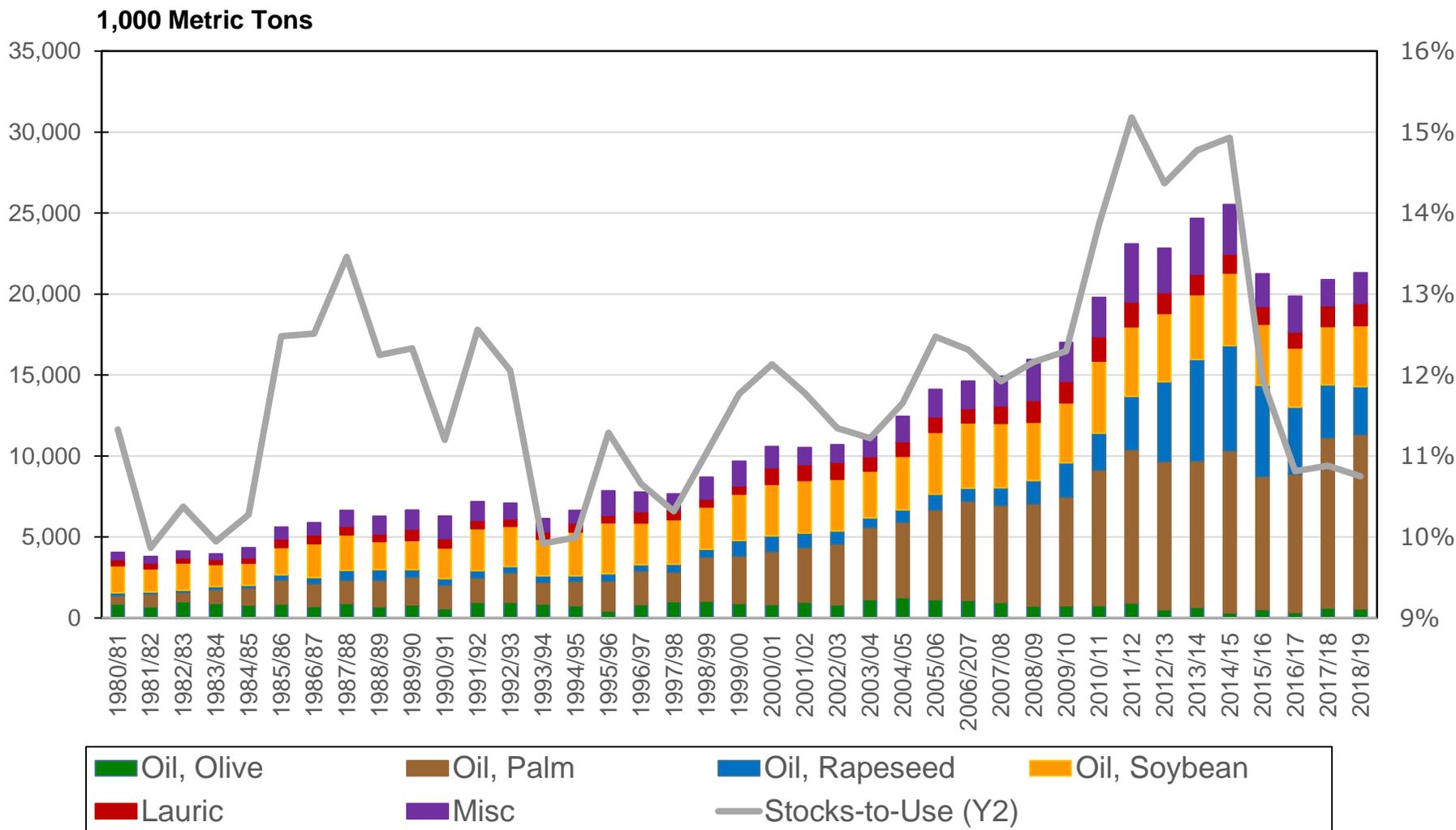


Rabobank





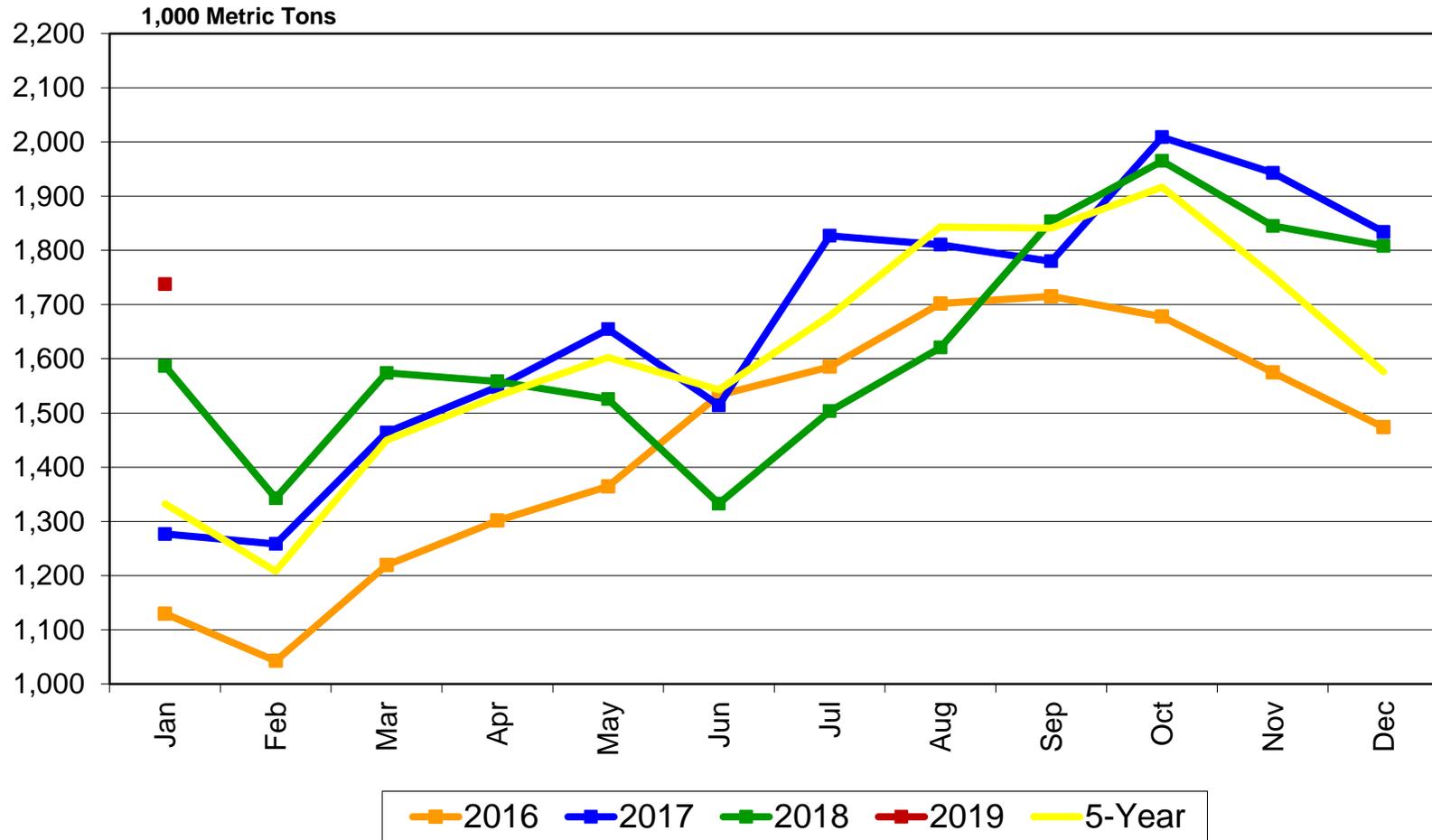
# Global Veg. Oil Stocks Increasing—Demand Remains Strong



Source: USDA-FAS, Rabobank 2019

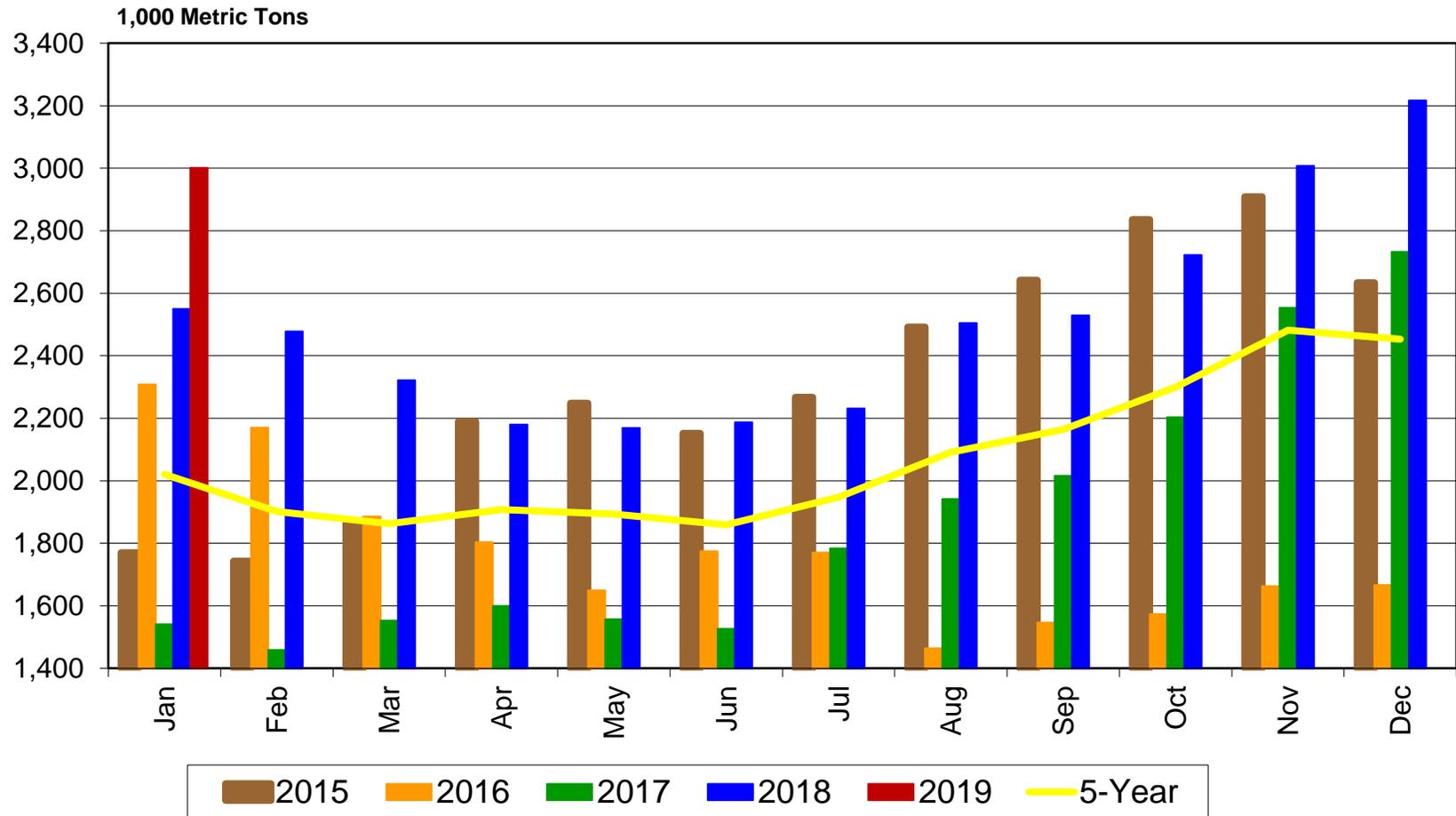
# Malaysia Palm Oil Production Remains High

Over next 2-3 years significant numbers of palm tree will need replacing



Source: MPOB, Rabobank 2019

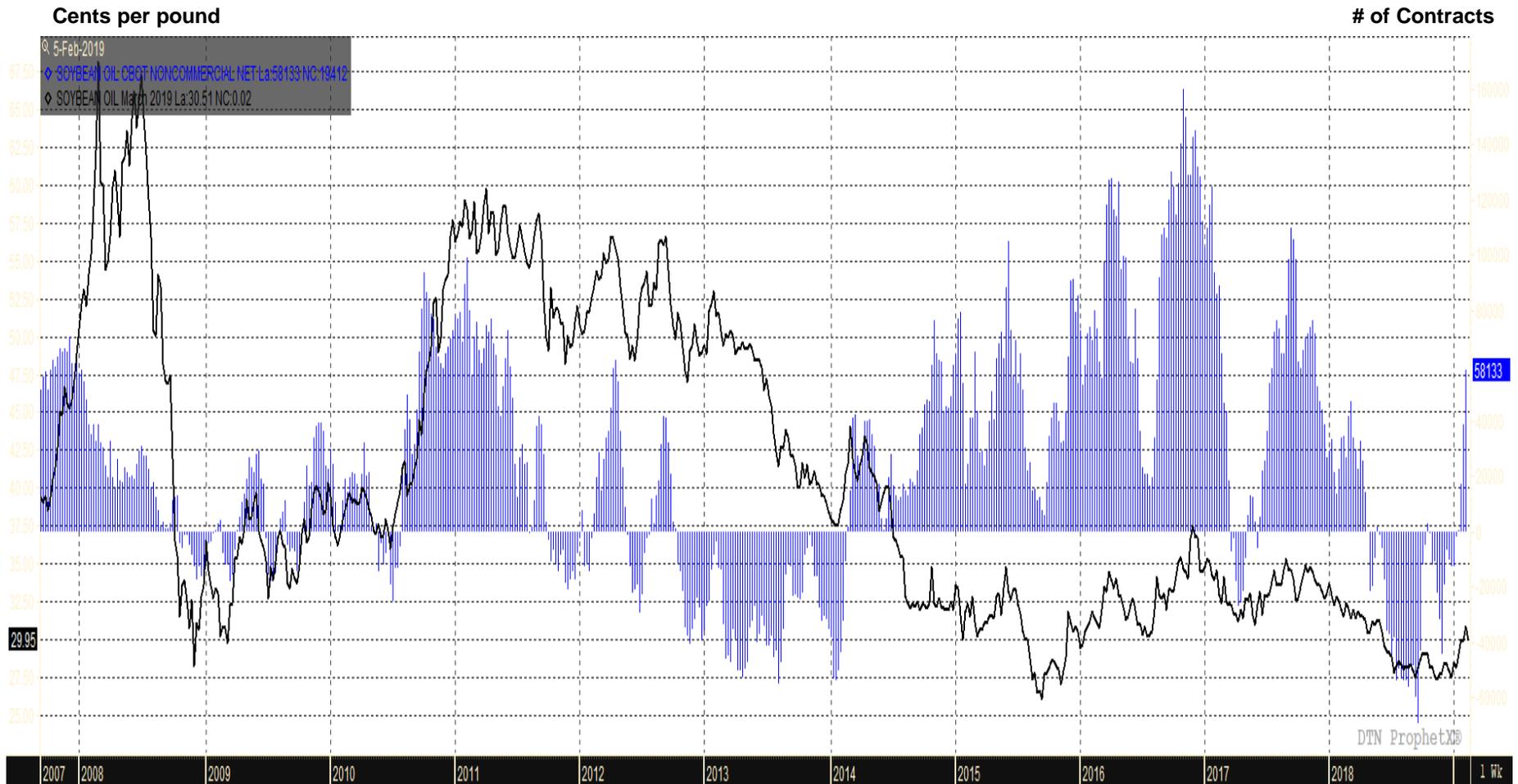
# Malaysia Palm Oil Stocks—Reaching Record Levels



\* Source: MPOB, Rabobank 2019

# Funds' Net Position and Nearby Soybean Oil Futures Price

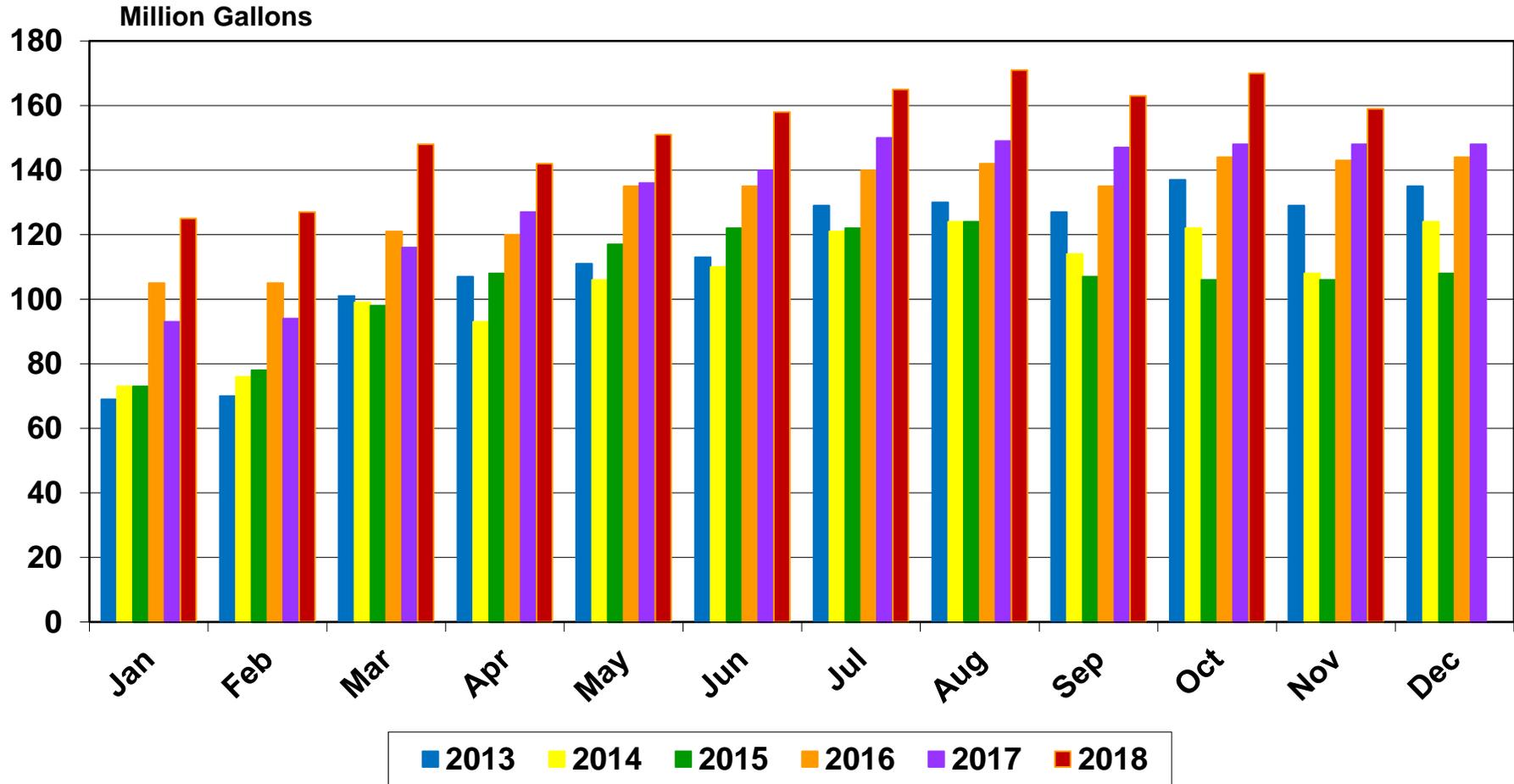
Funds have been supportive to soybean oil futures



Source: DTN

# Monthly B-100 Production

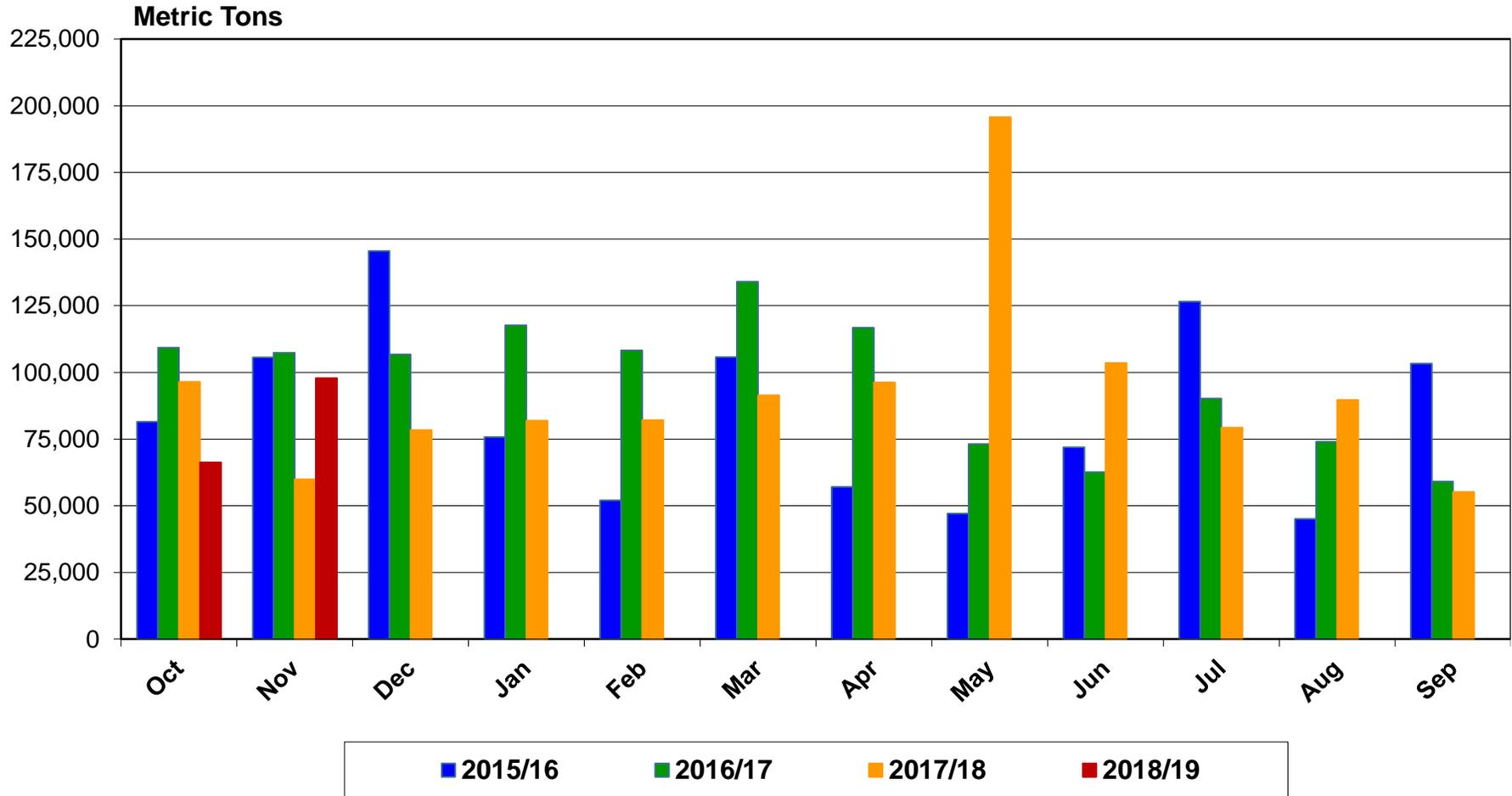
Year-to-Date through Nov 2018, up 16% versus 2017



Source: U.S. Energy Information Administration, Rabobank 2019

# Monthly U.S. Soybean Oil Exports

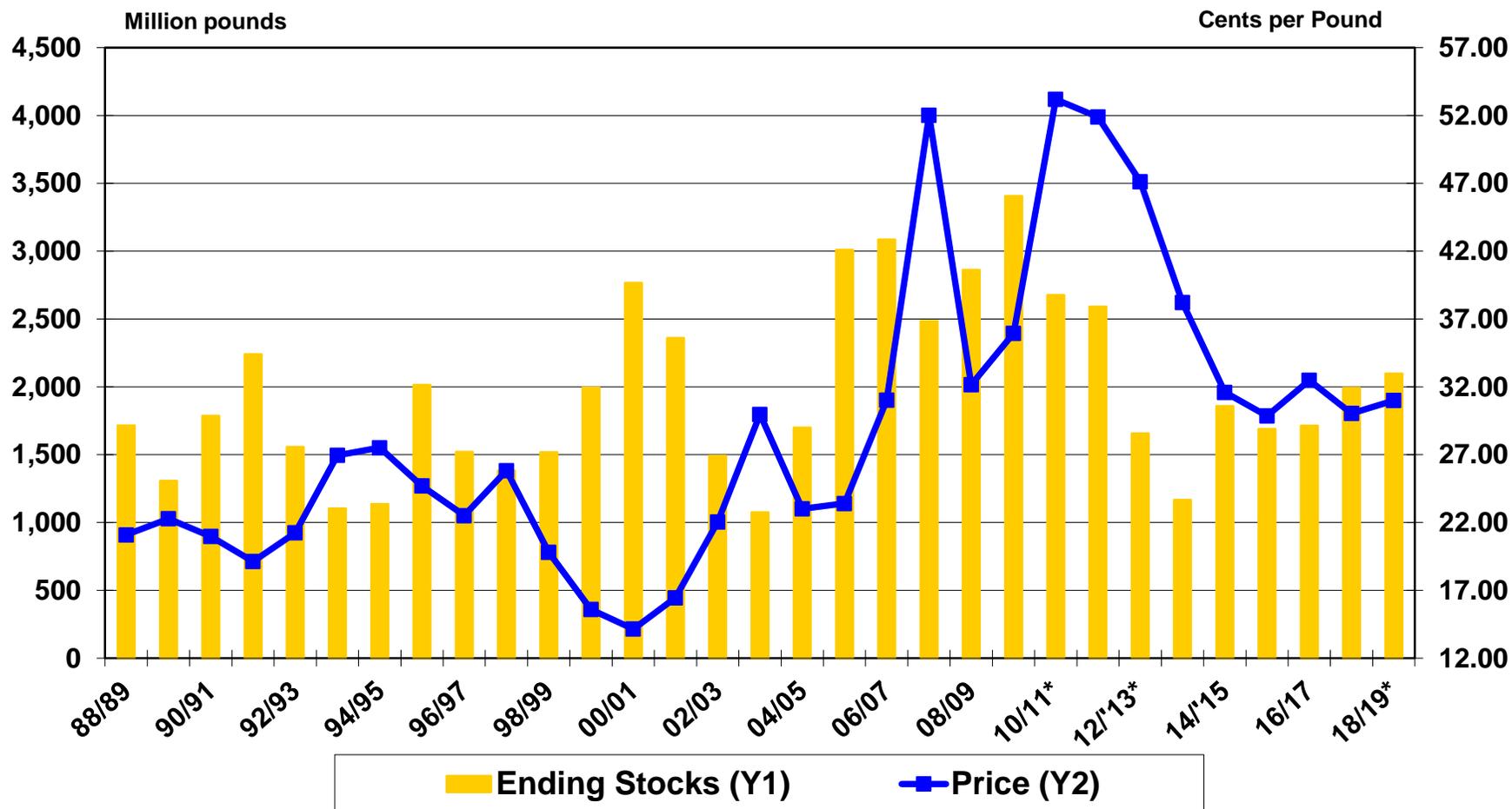
Year-to-date, exports are up nearly 5%



Source: USDA/FAS-GATS, Rabobank 2019



# U.S. Soybean Oil Stocks vs Price



Source: USDA, Rabobank 2019



## V. Wheat



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# Wheat--Bulls and Bears

## ***Bullish Factors***

- Ongoing drought in eastern Australia
- Lower production in Black Sea region
- Seasonal decline in Black Sea Region exports
- Price competitiveness of U.S. wheat

## ***Bearish Factors***

- 25% Chinese tariff on U.S. wheat imports
- U.S. and world wheat stocks are more than adequate
- Good moisture in the U.S. Southern Plains
- U.S. losing market share in China, Mexico and Caribbean
- Black Sea remains an aggressive exporter

## ***Swing Factors***

- U.S. export pace in LH of marketing year—Black Sea supplies dwindling
- 2019 Wheat Plantings—winter down 1.245 mln acres
- U.S. Dollar
- Trade Tensions
- Currency of export competitors
- U.S. Spring weather



# U.S. All-Wheat Balance Sheet (million bushels)

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	USDA 2018/19	Rabo 2019/20
Planted Acres (mln)	54.3	55.3	56.2	56.8	55.0	50.1	46.1	47.8	47.8
Harvested Acres (mln)	45.7	48.8	45.3	46.4	47.3	43.8	37.6	39.6	39.9
Yield (bu./acre)	43.6	46.2	47.1	43.7	43.6	52.7	46.4	47.6	49.6
<b>Supply</b>									
Beginning Stocks (6/1)	863	743	718	590	752	976	1,181	1,099	971
Production	1,993	2,253	2,135	2,026	2,062	2,309	1,741	1,884	1,980
Imports	112	123	173	151	113	118	157	140	142
<b>Total Supply</b>	<b>2,968</b>	<b>3,118</b>	<b>3,026</b>	<b>2,768</b>	<b>2,927</b>	<b>3,402</b>	<b>3,077</b>	<b>3,123</b>	<b>3,093</b>
<b>Disappearance</b>									
Food	941	945	955	958	957	949	964	970	983
Exports	1,051	1,012	1,176	864	778	1,051	901	1,000	1,009
Seed, Feed & Residual	233	443	305	193	216	221	114	143	172
<b>Total Disappearance</b>	<b>2,226</b>	<b>2,400</b>	<b>2,436</b>	<b>2,015</b>	<b>1,951</b>	<b>2,222</b>	<b>1,980</b>	<b>2,113</b>	<b>2,164</b>
<b>Ending Stocks</b>	<b>743</b>	<b>718</b>	<b>590</b>	<b>752</b>	<b>976</b>	<b>1,181</b>	<b>1,099</b>	<b>1,010</b>	<b>929</b>
<b>Stocks-to-Use Ratio (%)</b>	<b>33.3%</b>	<b>29.9%</b>	<b>24.2%</b>	<b>37.3%</b>	<b>50.0%</b>	<b>53.2%</b>	<b>55.6%</b>	<b>45.3%</b>	<b>42.9%</b>
<b>Average Farm Price (\$/bu.)</b>	<b>\$7.24</b>	<b>\$7.77</b>	<b>\$6.87</b>	<b>\$5.99</b>	<b>\$4.89</b>	<b>\$3.89</b>	<b>\$4.72</b>	<b>\$5.15</b>	<b>\$5.45</b>

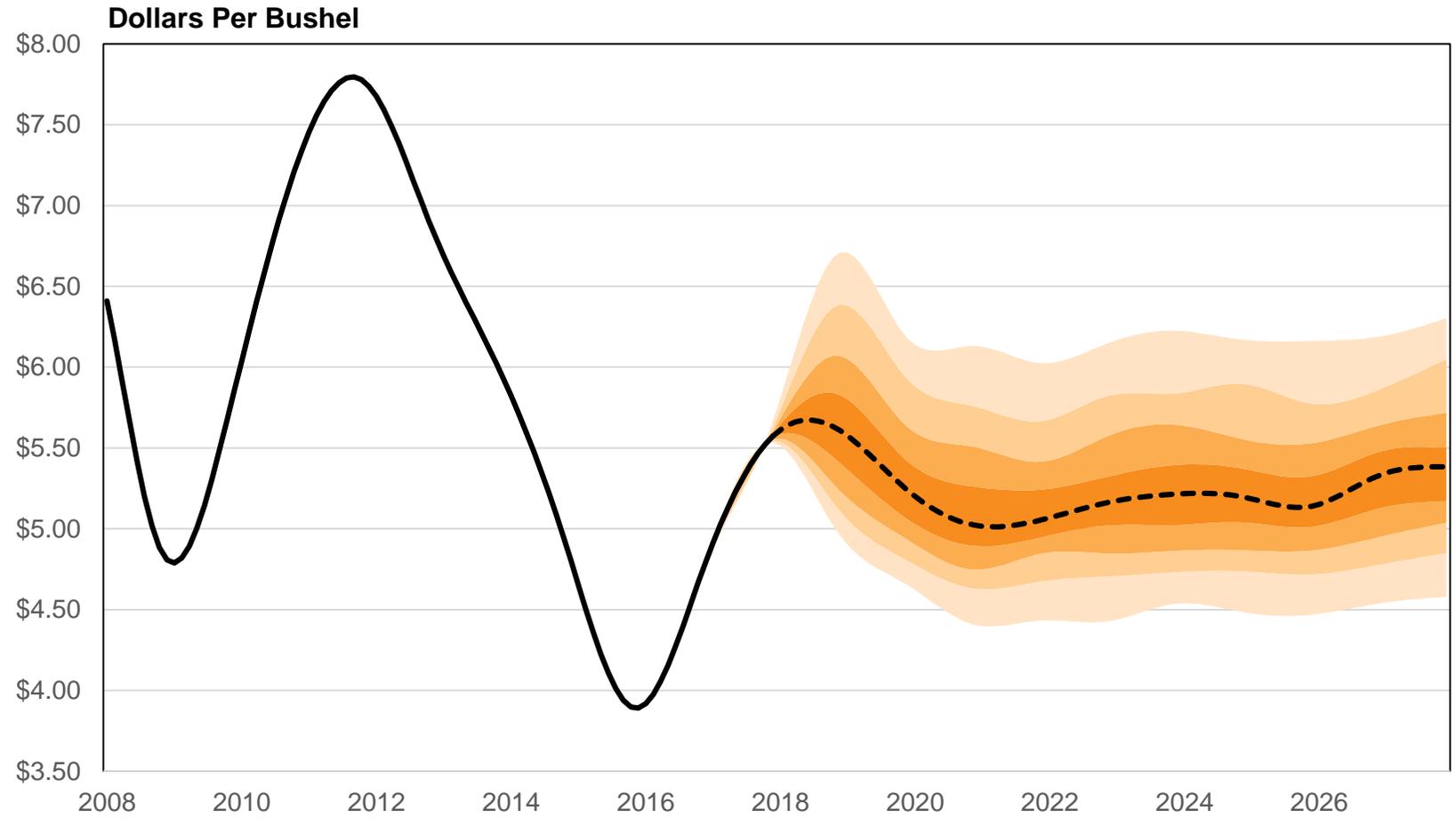
Source: USDA, Rabobank 2019

# All-Wheat Price Probabilities (Average Price Received by Farmer)

All-wheat prices will be in \$5.00-\$5.20 area



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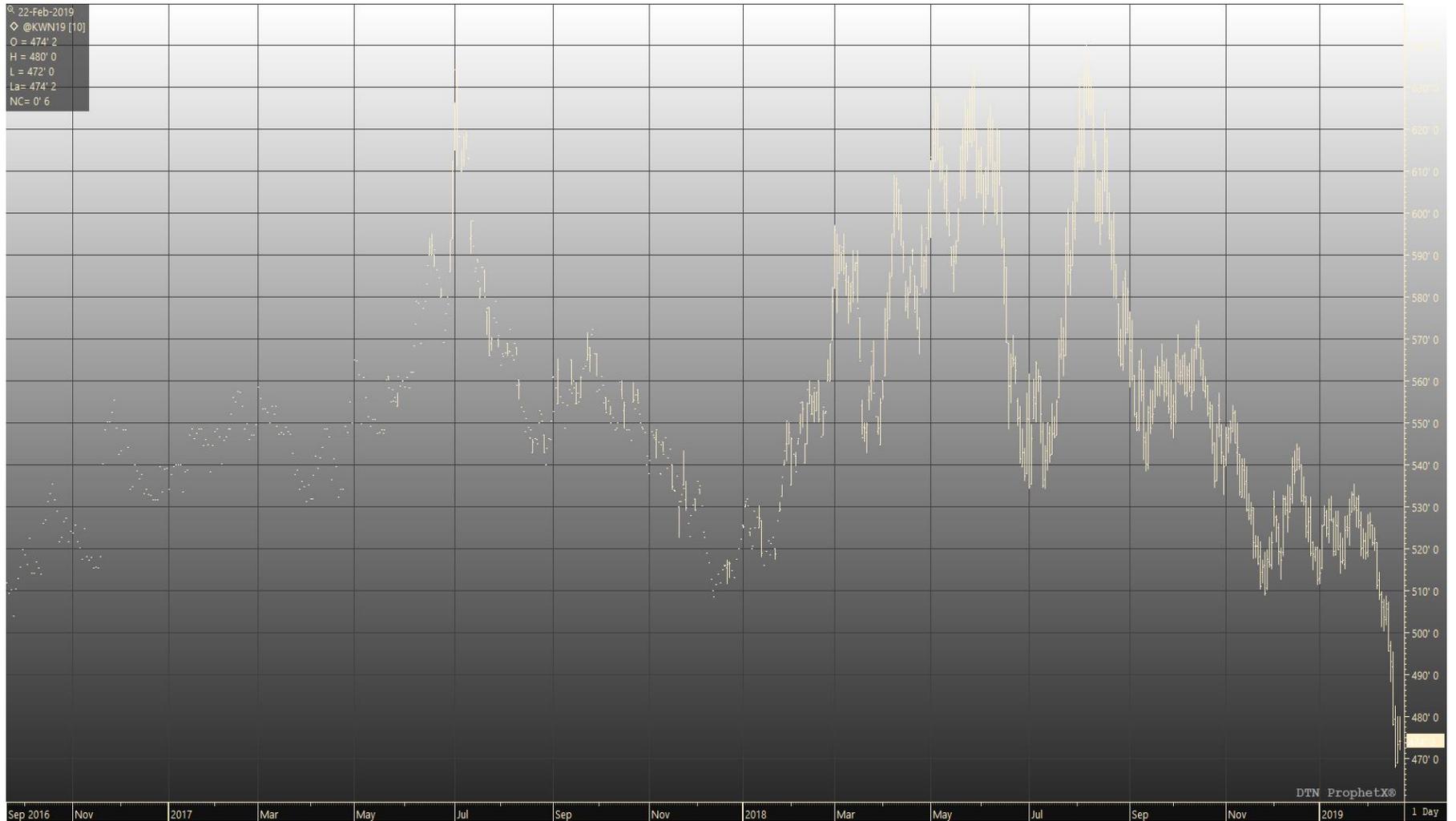
Source: Rabobank 2018

# U.S. HRW Balance Sheet (million bushels)



	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	USDA 2018/19
Planted Acres (mln)	28.2	28.5	29.6	29.7	30.5	29.2	26.6	23.4	22.9
Harvested Acres (mln)	23.9	21.5	24.6	20.4	21.9	23.2	21.9	17.6	16.9
Yield (bu./acre)	42.1	36.4	40.6	36.6	33.7	35.8	49.5	42.5	39.1
<b>Supply</b>									
Beginning Stocks (6/1)	385	387	317	343	237	294	446	589	581
Production	1,006	783	998	747	739	830	1,082	750	662
Imports	0	0	18	19	10	6	5	7	5
<b>Total Supply</b>	<b>1,392</b>	<b>1,170</b>	<b>1,333</b>	<b>1,109</b>	<b>985</b>	<b>1,130</b>	<b>1,533</b>	<b>1,346</b>	<b>1,247</b>
<b>Disappearance</b>									
Food	359	404	404	370	370	391	385	392	392
Exports	617	397	382	446	272	227	453	371	320
Seed, Feed & Residual	29	52	204	56	50	67	105	3	45
<b>Total Disappearance</b>	<b>1,005</b>	<b>853</b>	<b>990</b>	<b>872</b>	<b>692</b>	<b>685</b>	<b>943</b>	<b>765</b>	<b>757</b>
<b>Ending Stocks</b>	<b>387</b>	<b>317</b>	<b>343</b>	<b>237</b>	<b>294</b>	<b>446</b>	<b>589</b>	<b>580</b>	<b>490</b>
<b>Stocks-to-Use Ratio (%)</b>	<b>38.5%</b>	<b>37.2%</b>	<b>34.6%</b>	<b>27.1%</b>	<b>42.5%</b>	<b>65.1%</b>	<b>62.4%</b>	<b>75.7%</b>	<b>64.7%</b>
<b>Average Farm Price (\$/bu.)</b>	<b>\$6.49</b>	<b>\$6.92</b>	<b>\$7.56</b>	<b>\$7.03</b>	<b>\$6.02</b>	<b>\$4.68</b>	<b>\$3.37</b>	<b>\$4.18</b>	<b>\$4.65</b>

# Kansas City July Wheat Look Like a Buy



Source: DTN

# U.S. HRS Balance Sheet (million bushels)

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	USDA 2018/19*
Planted Acres (mln)	12.8	11.6	11.7	10.9	12.2	12.6	10.9	10.5	12.7
Harvested Acres (mln)	12.5	11.3	11.5	10.7	12.0	12.3	10.6	9.7	12.4
Yield (bu./acre)	45.1	35.2	43.9	45.8	46.3	46.0	46.3	39.8	47.3
<b>Supply</b>									
Beginning Stocks (6/1)	234	185	151	165	169	212	272	235	191
Production	564	396	503	491	556	568	491	384	587
Imports	28	35	44	77	68	62	67	88	72
<b>Total Supply</b>	<b>826</b>	<b>616</b>	<b>698</b>	<b>733</b>	<b>792</b>	<b>842</b>	<b>830</b>	<b>707</b>	<b>850</b>
<b>Disappearance</b>									
Food	247	223	230	267	266	251	250	254	260
Exports	340	243	233	246	274	254	319	228	300
Seed, Feed & Residual	54	0	71	51	40	55	25	34	28
<b>Total Disappearance</b>	<b>641</b>	<b>465</b>	<b>533</b>	<b>564</b>	<b>580</b>	<b>570</b>	<b>595</b>	<b>516</b>	<b>588</b>
<b>Ending Stocks</b>	<b>185</b>	<b>151</b>	<b>165</b>	<b>169</b>	<b>212</b>	<b>272</b>	<b>235</b>	<b>191</b>	<b>262</b>
<b>Stocks-to-Use Ratio (%)</b>	<b>28.9%</b>	<b>32.5%</b>	<b>31.0%</b>	<b>30.0%</b>	<b>36.6%</b>	<b>47.7%</b>	<b>39.5%</b>	<b>37.0%</b>	<b>44.6%</b>
<b>Average Farm Price (\$/bu.)</b>	<b>\$6.54</b>	<b>\$8.38</b>	<b>\$8.27</b>	<b>\$6.73</b>	<b>\$5.73</b>	<b>\$4.75</b>	<b>\$4.60</b>	<b>\$5.83</b>	<b>\$5.00</b>

# Surprising Funds are out of Wheat Market other than HRS



Chicago Wheat



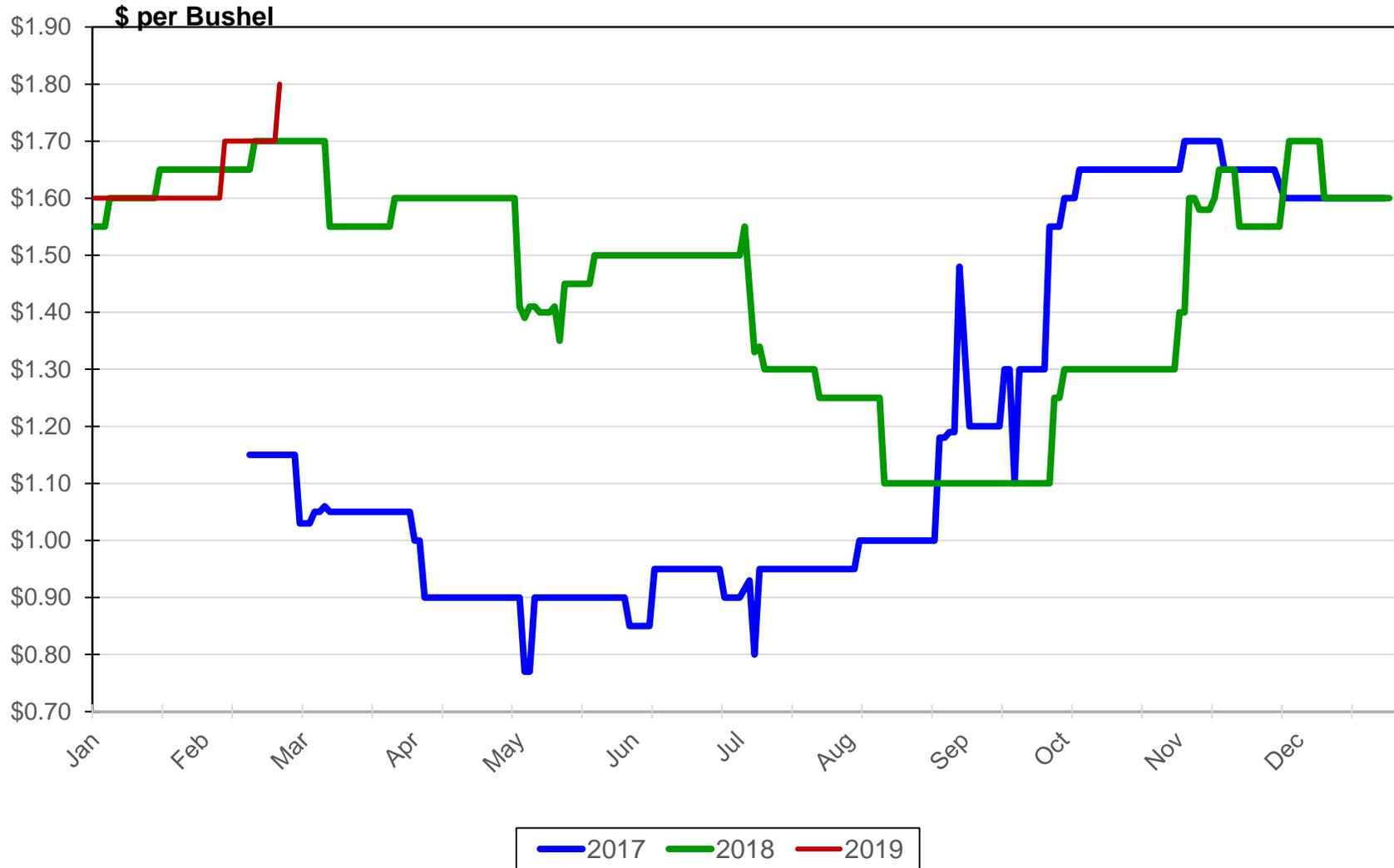
Kansas City Wheat

Minneapolis Wheat



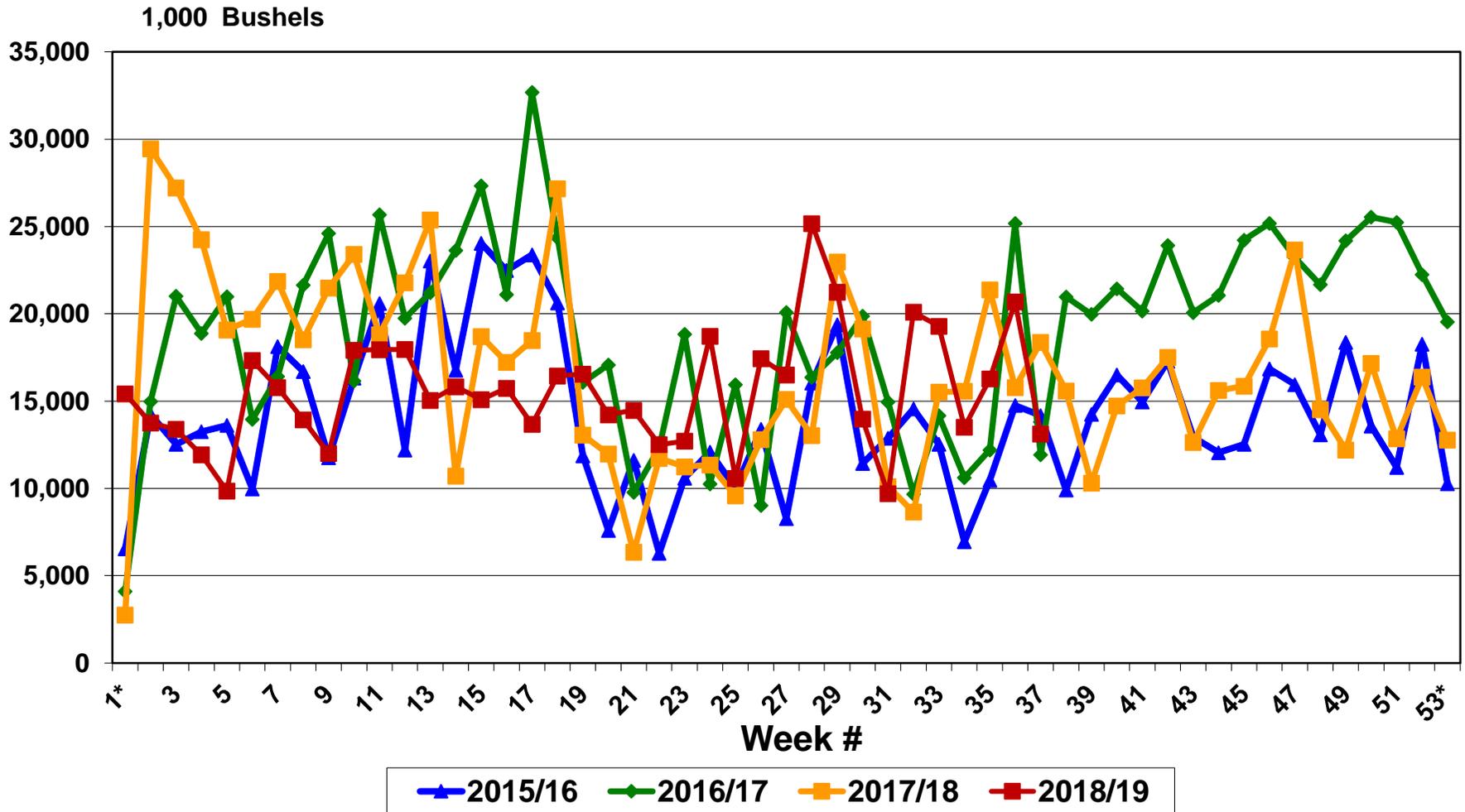
# HRW Portland CIF Basis Bids

Reflecting expected increase in export business



# U.S. Wheat Export Inspections

running 8.6% behind last year's pace—trade is optimistic going forward



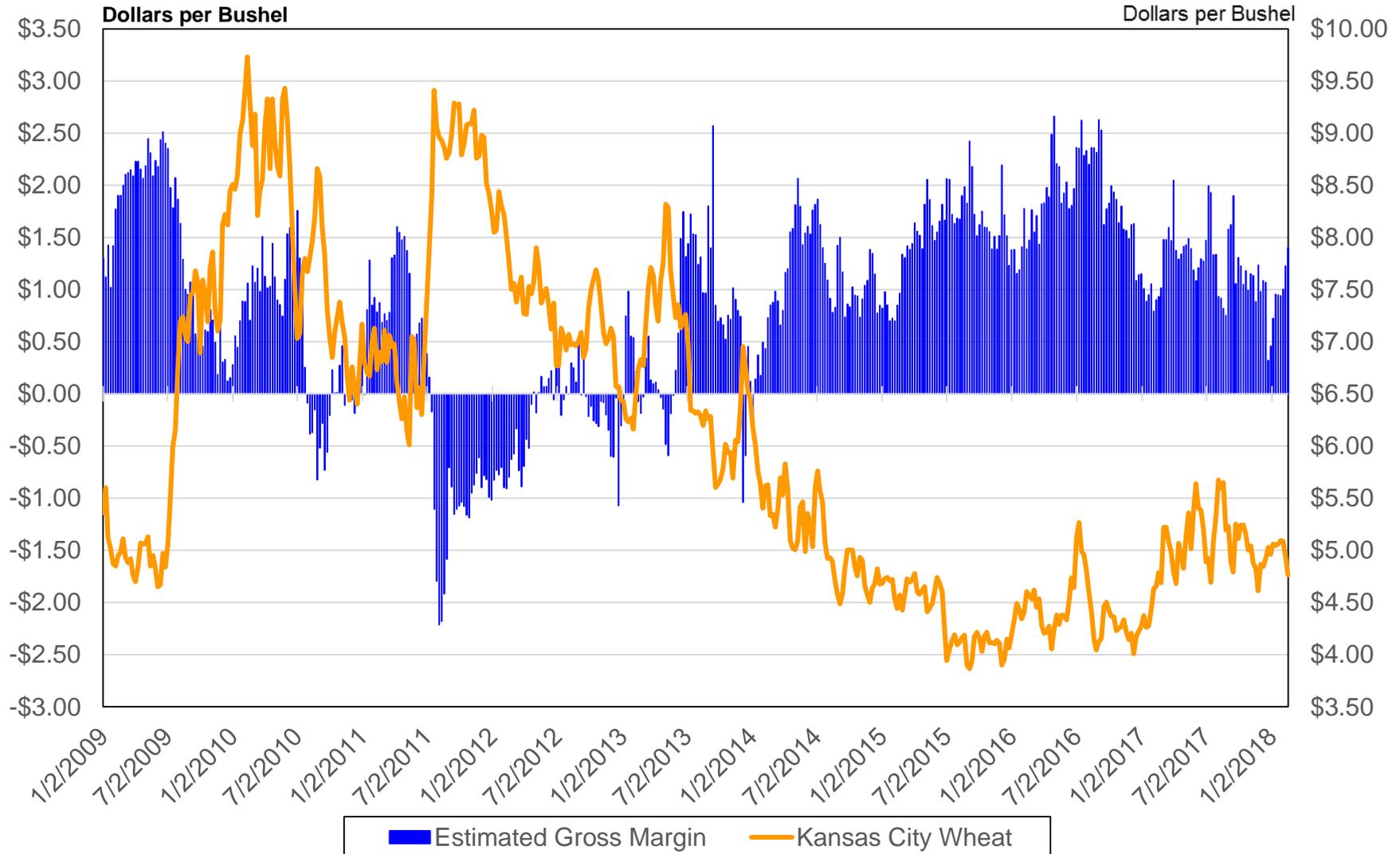
Source: USDA/AMS, Rabobank 2018

# Calculated Gross Flour Milling Margins

"It is good to be a flour miller"

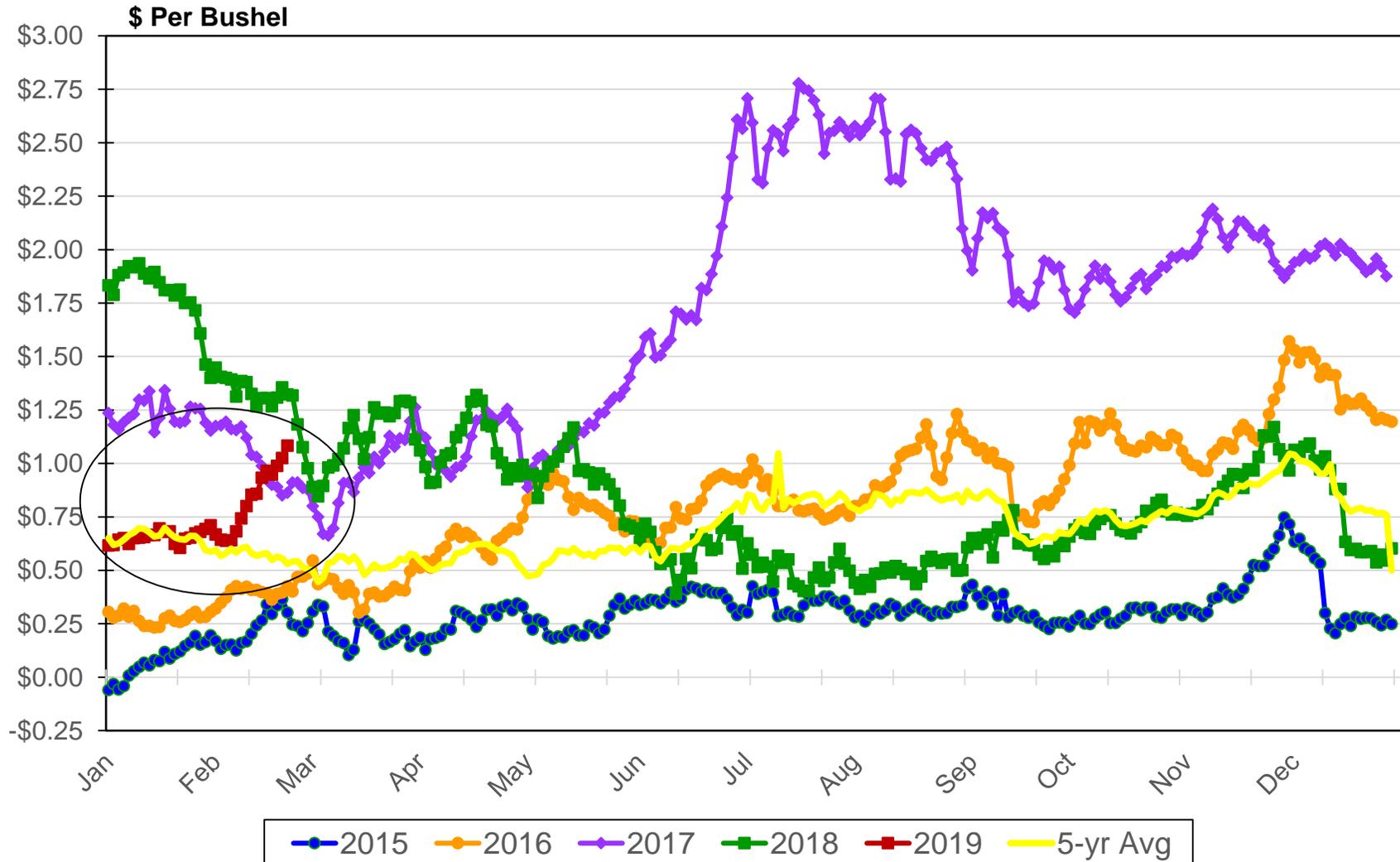


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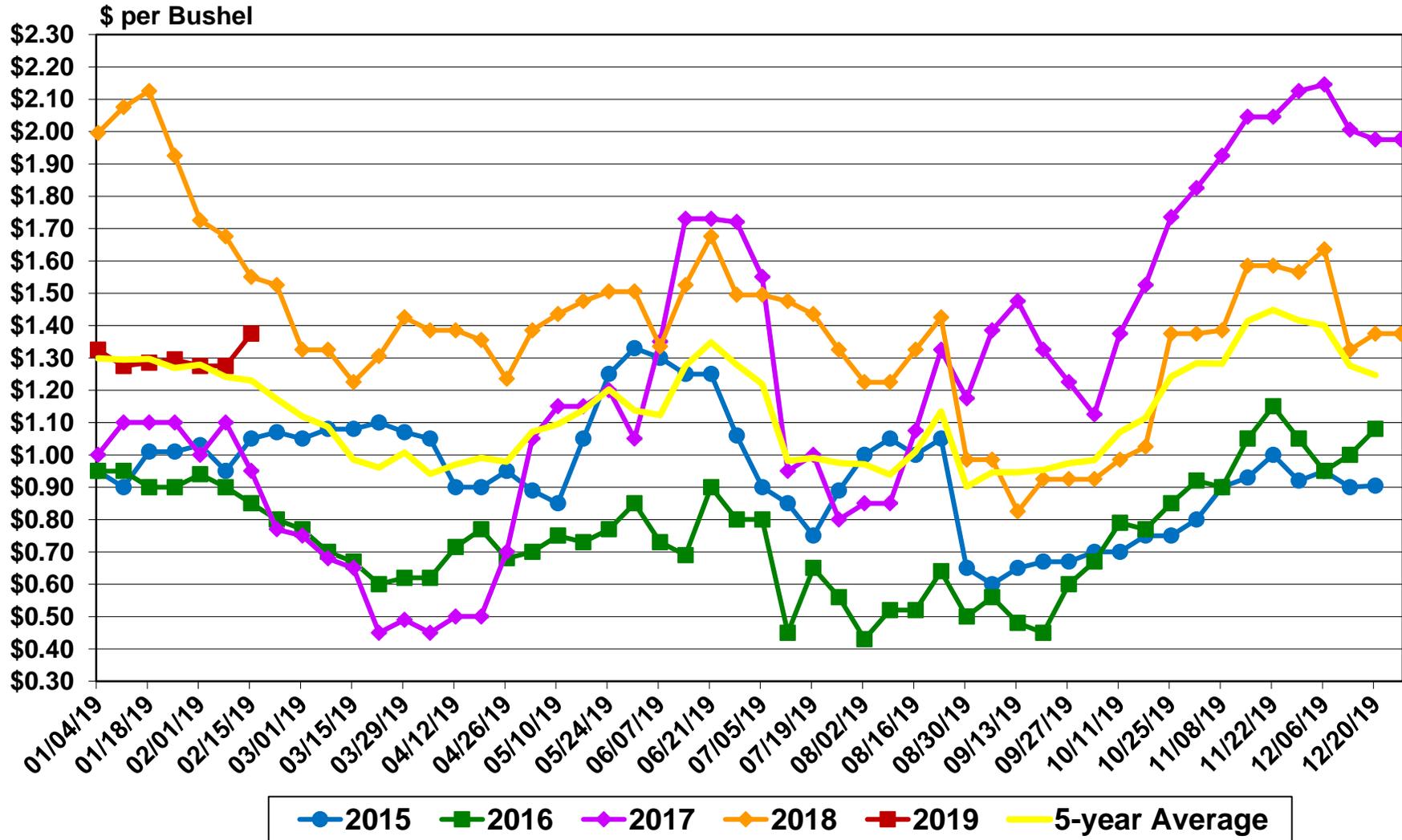


# Minneapolis/Kansas City Spread

Market has begun to think about protein demand recently



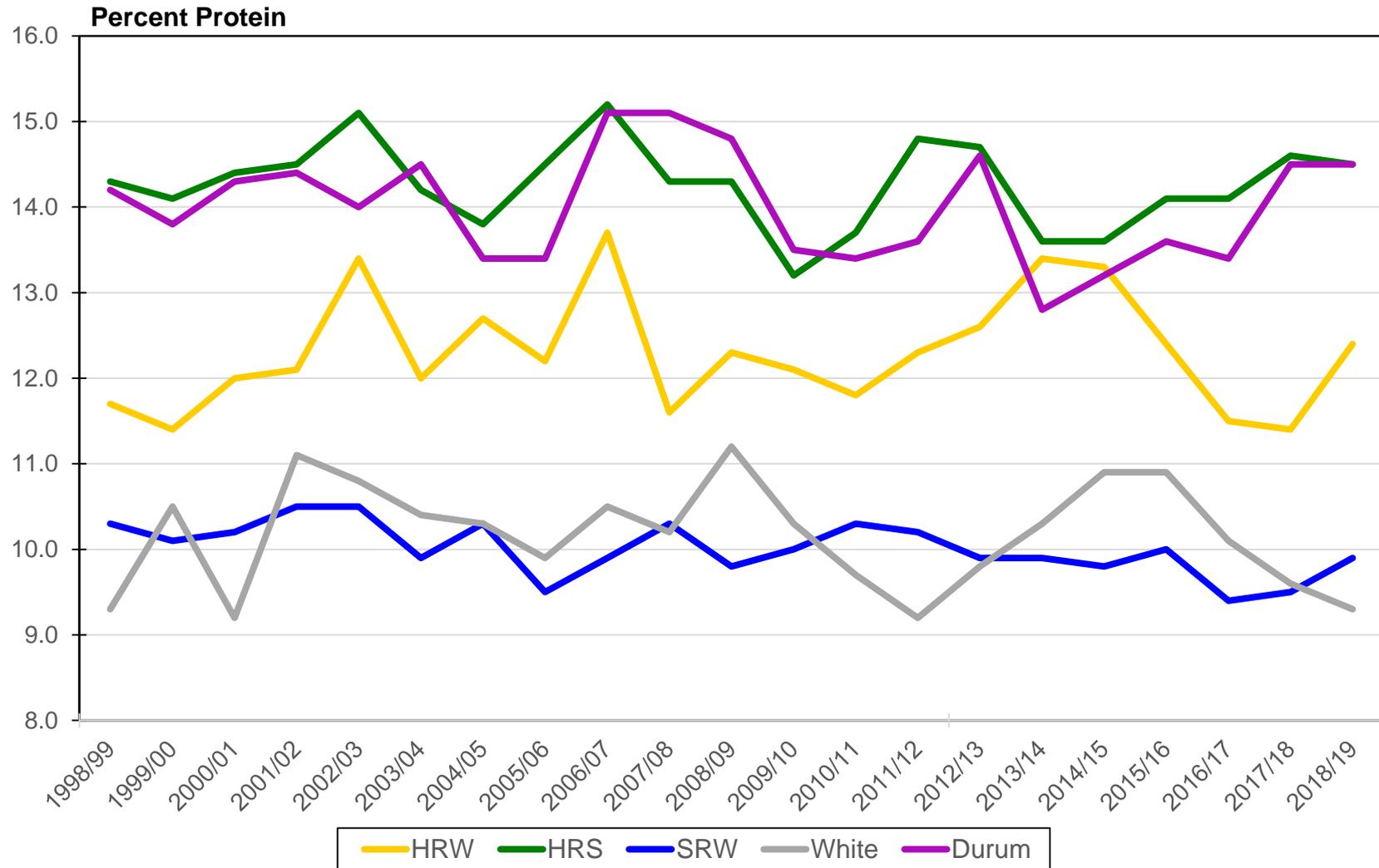
# 12% Kansas City Protein Premium—Moving Against Seasonal



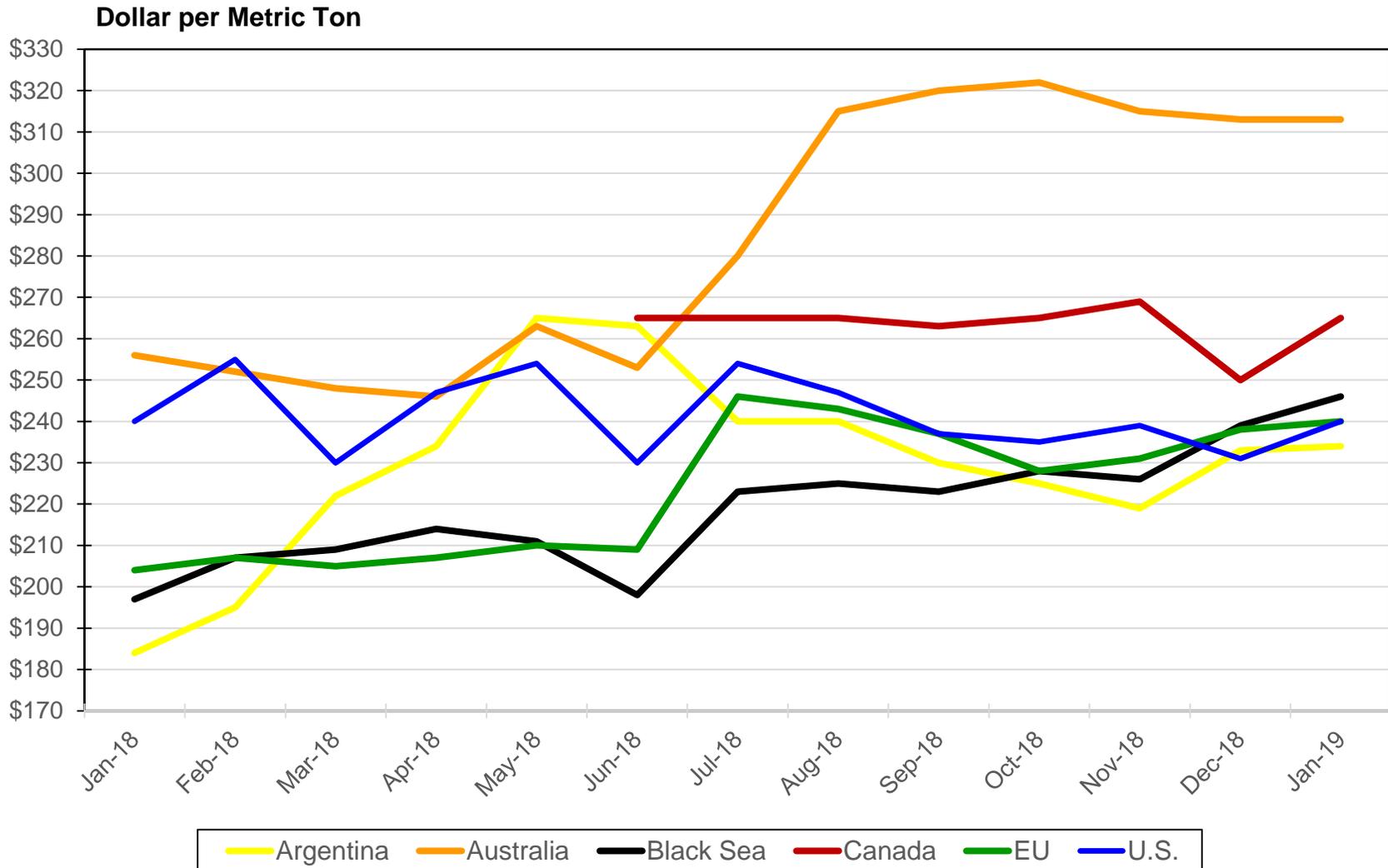
Source: Sosland Publishing, Rabobank 2019

# U.S. Wheat Crop Protein Percentages

Overall protein percent improved in 2018, except white wheat

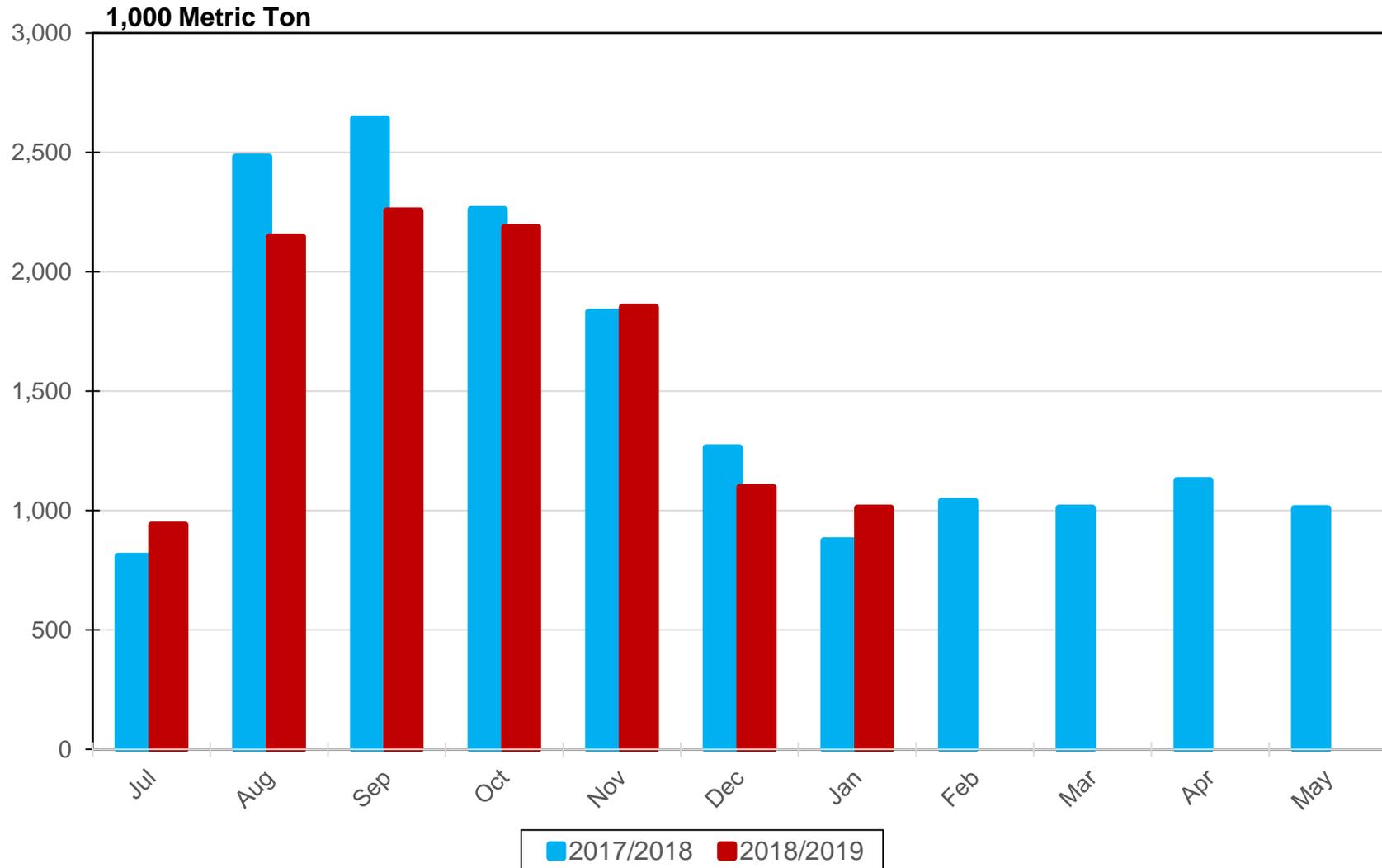


# U.S. Wheat Export Prices are Competitive in the Global Market



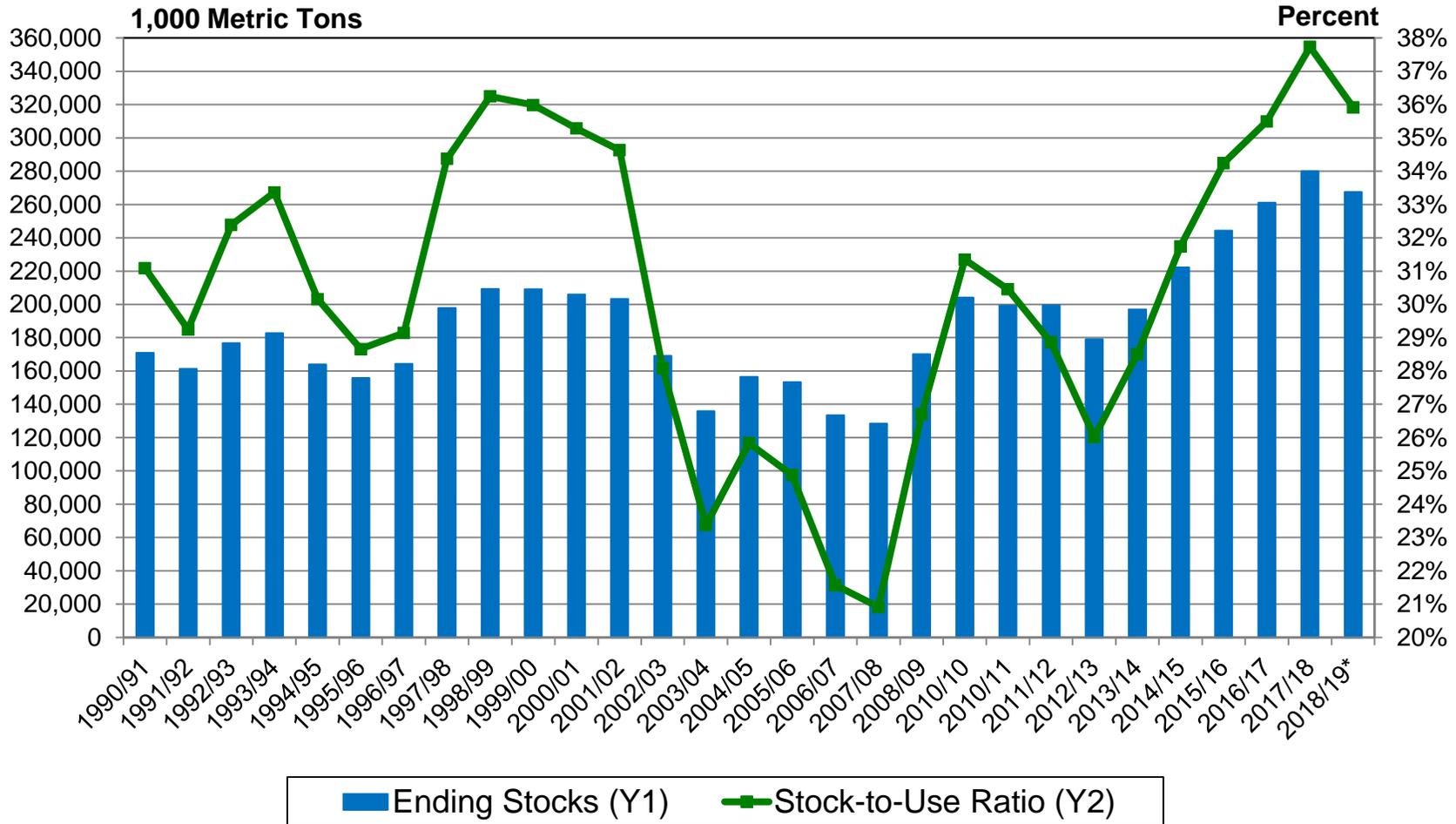
# Ukrainian Exports Down 5.5%, despite 7.3% decline in Production

Exports dropping off seasonally portend increase in U.S. exports



# Contracting World Wheat Stocks, But...

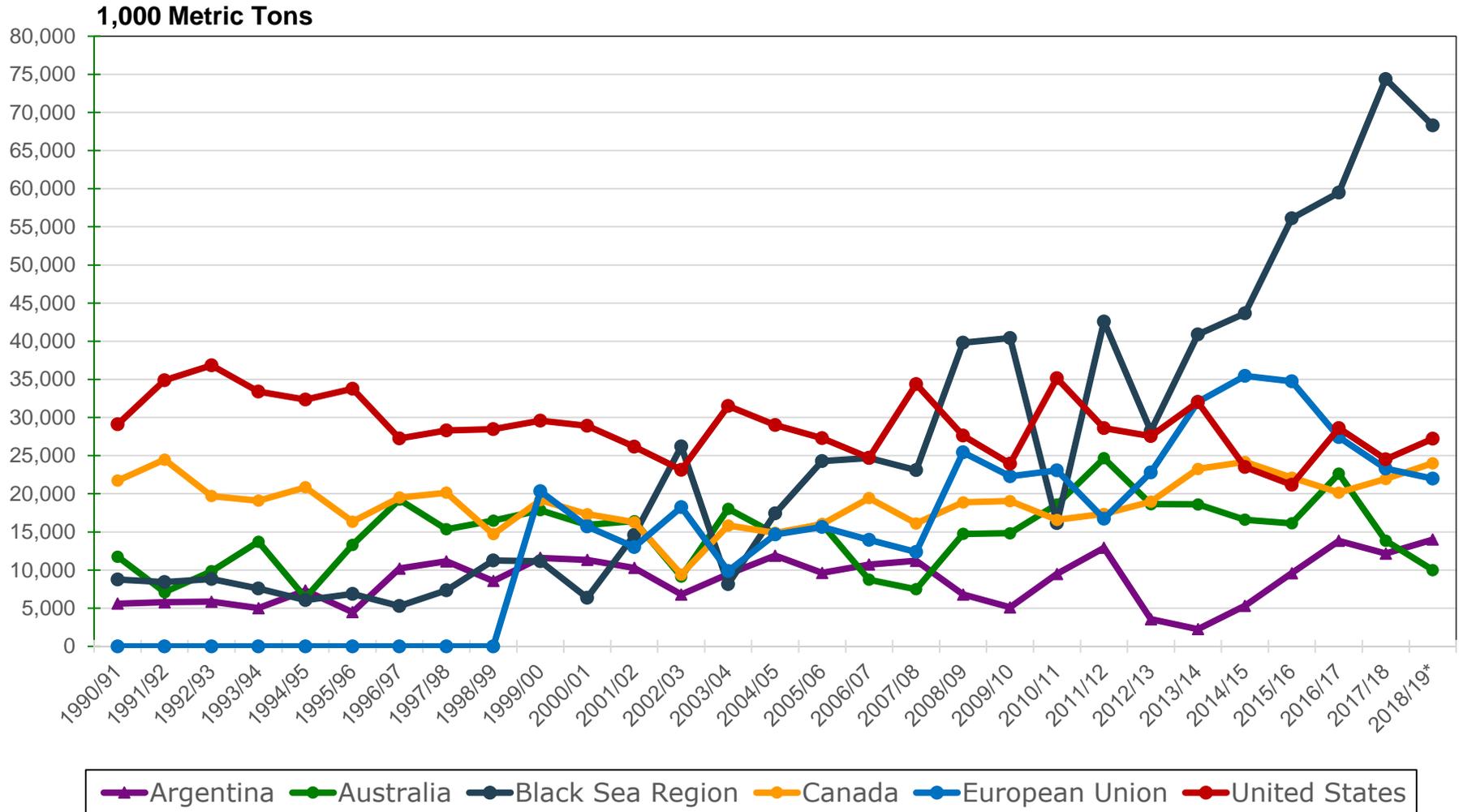
## Second highest stocks on record



Source: USDA/FAS, Rabobank, 2019

# Global Wheat Exports by Country/Region

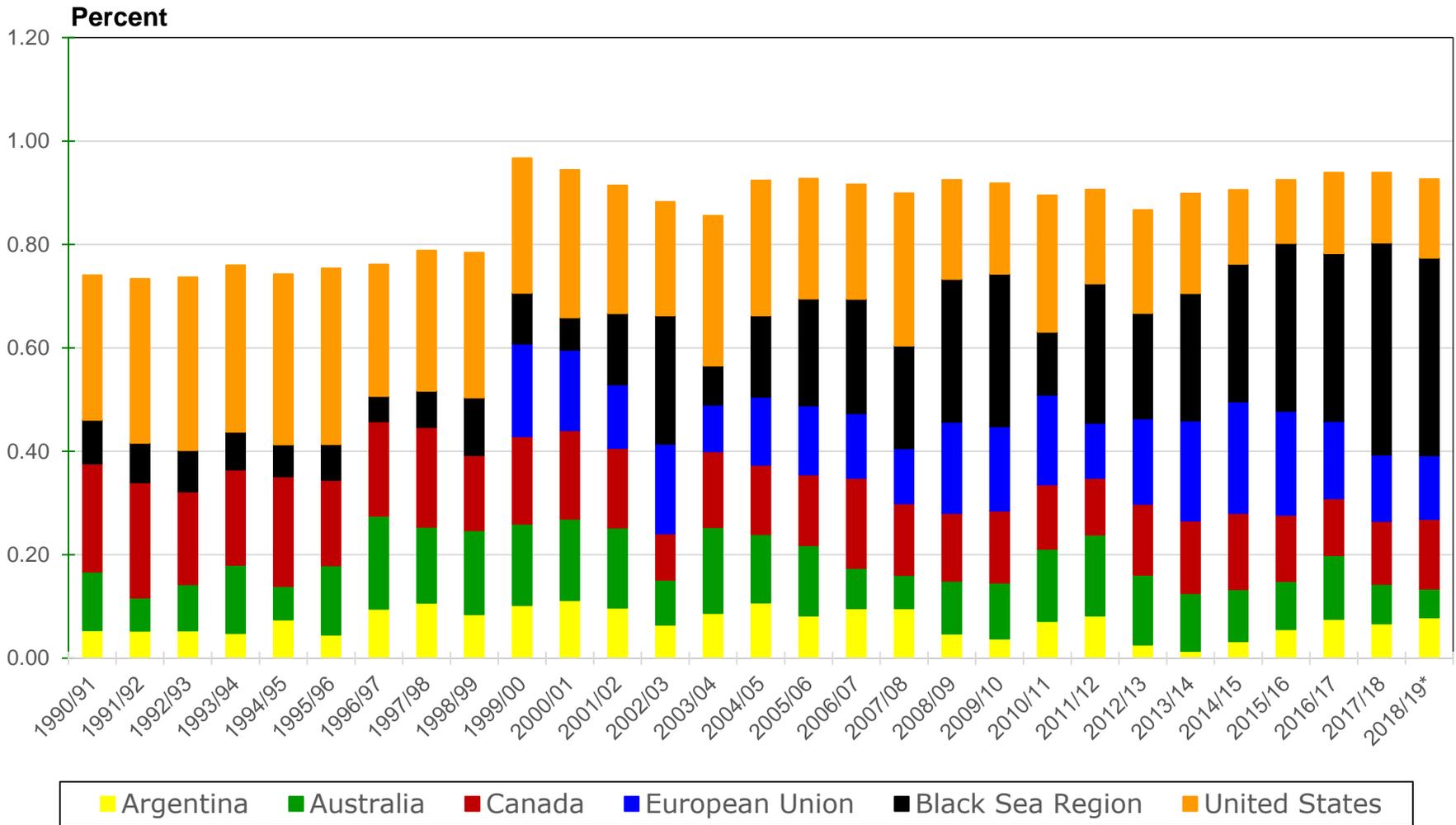
Black Sea forecast is down, but they are off to stronger pace than last year



Source: USDA/FAS, Rabobank, 2017

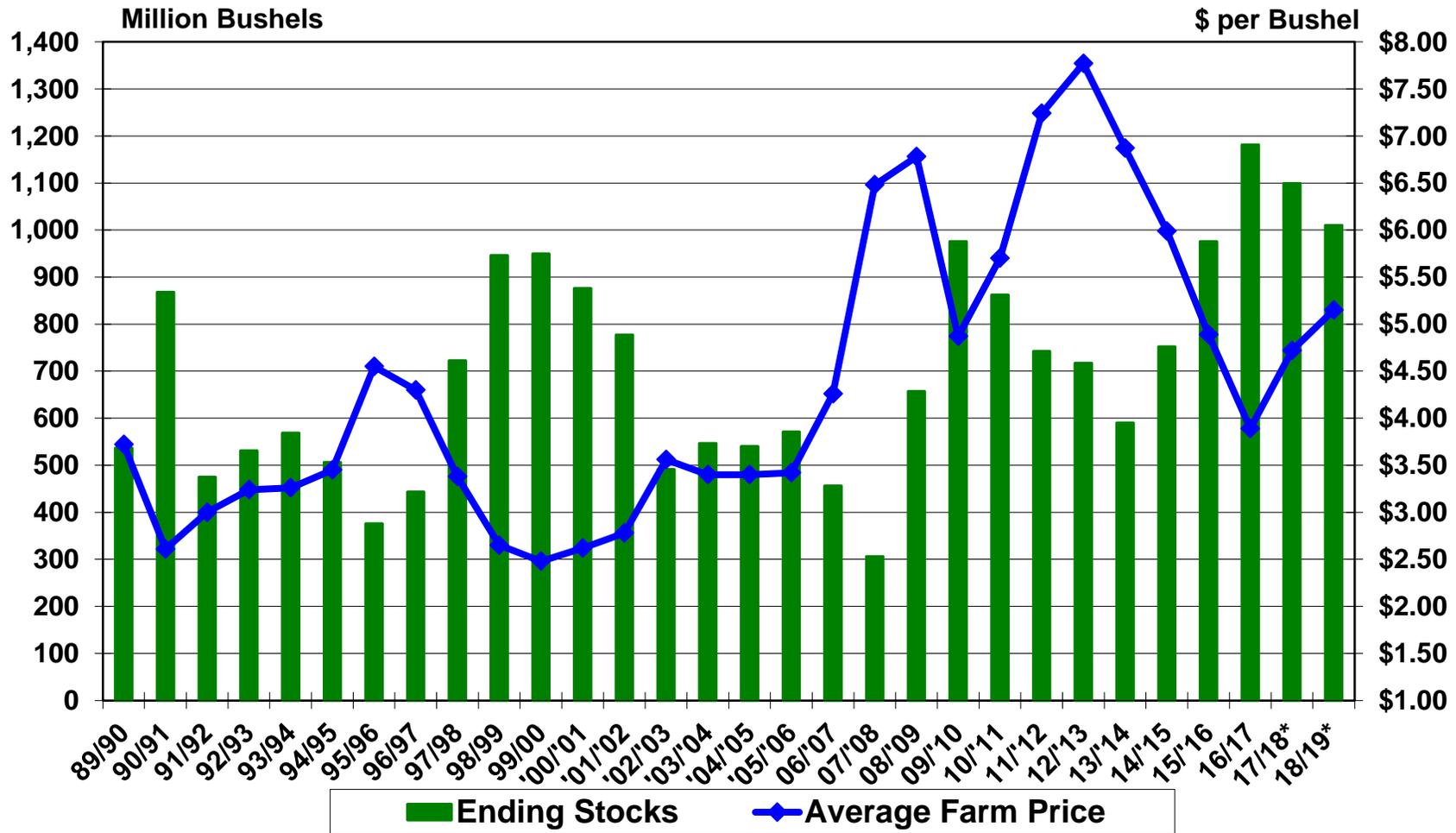
# Global Wheat Exports Market Share

## Black Sea expanding its share of world market



Source: USDA/FAS, Rabobank, 2018

# U.S. Wheat Stocks Declining, but still Burdensome



- Rabobank Projection
- Source: USDA/WASDE, Rabobank 2018

# Contact Information

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# Banking & Securities Disclosure

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