



Soybean Outlook

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Overview

- Domestic Supply and Demand
- Global Supply and Demand
- Past, Present, and Future Prices
- Concluding Thoughts



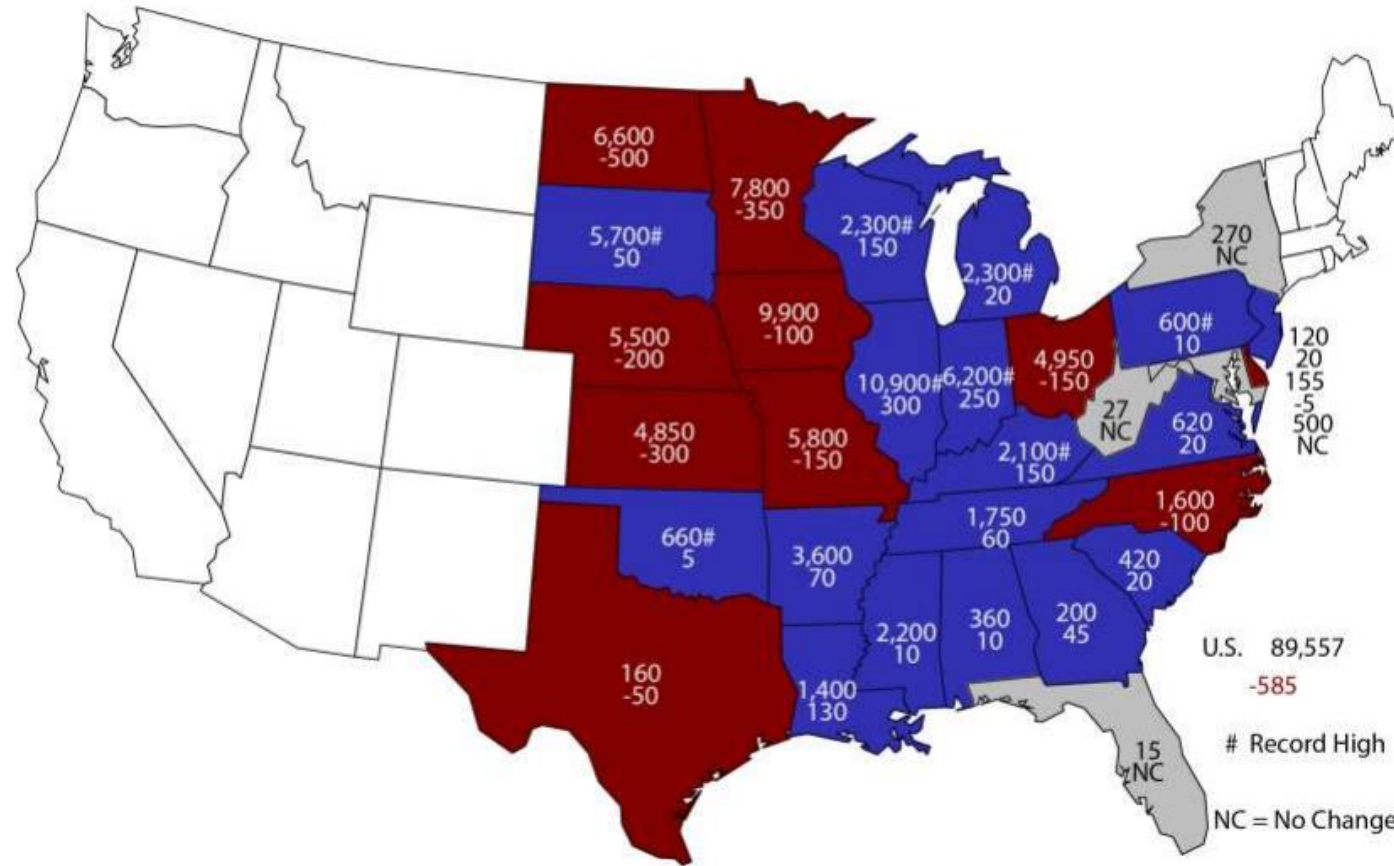
Stocks Build!

DOMESTIC SUPPLY AND DEMAND

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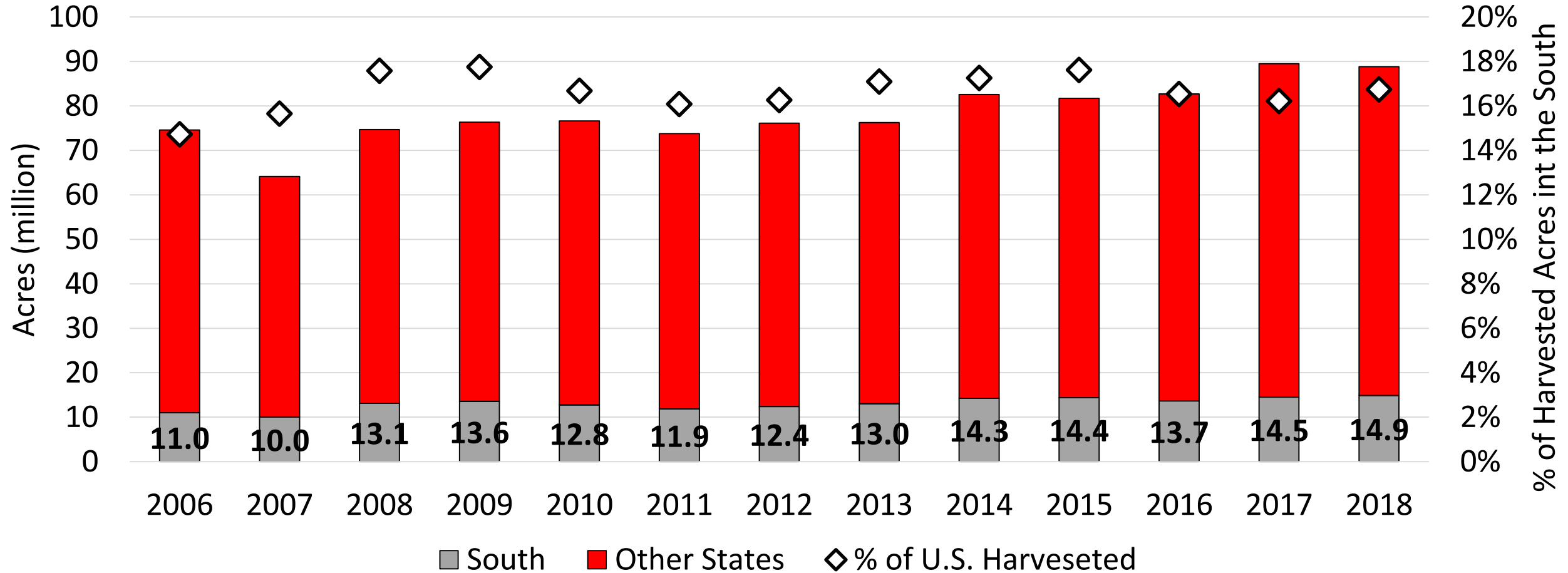


2018 Soybean Planted Area (000) Acres and Change From Previous Year



USDA-NASS
6-29-18

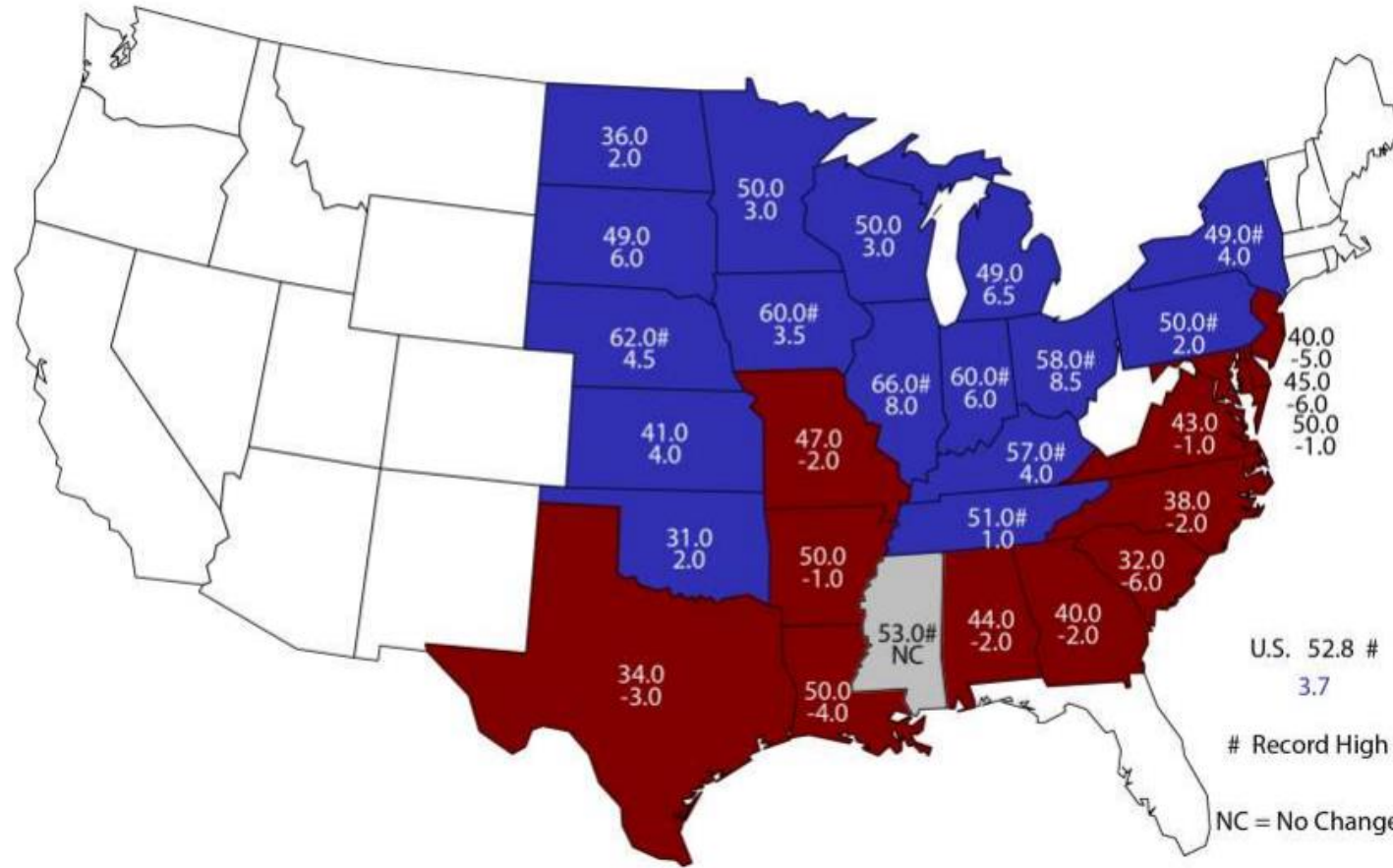
U.S. and Southern Region Soybean Harvested Acres, 2006-2018





September 1, 2018 Soybean Yield

Bushels and Change From Previous Year



USDA-NASS
9-12-18

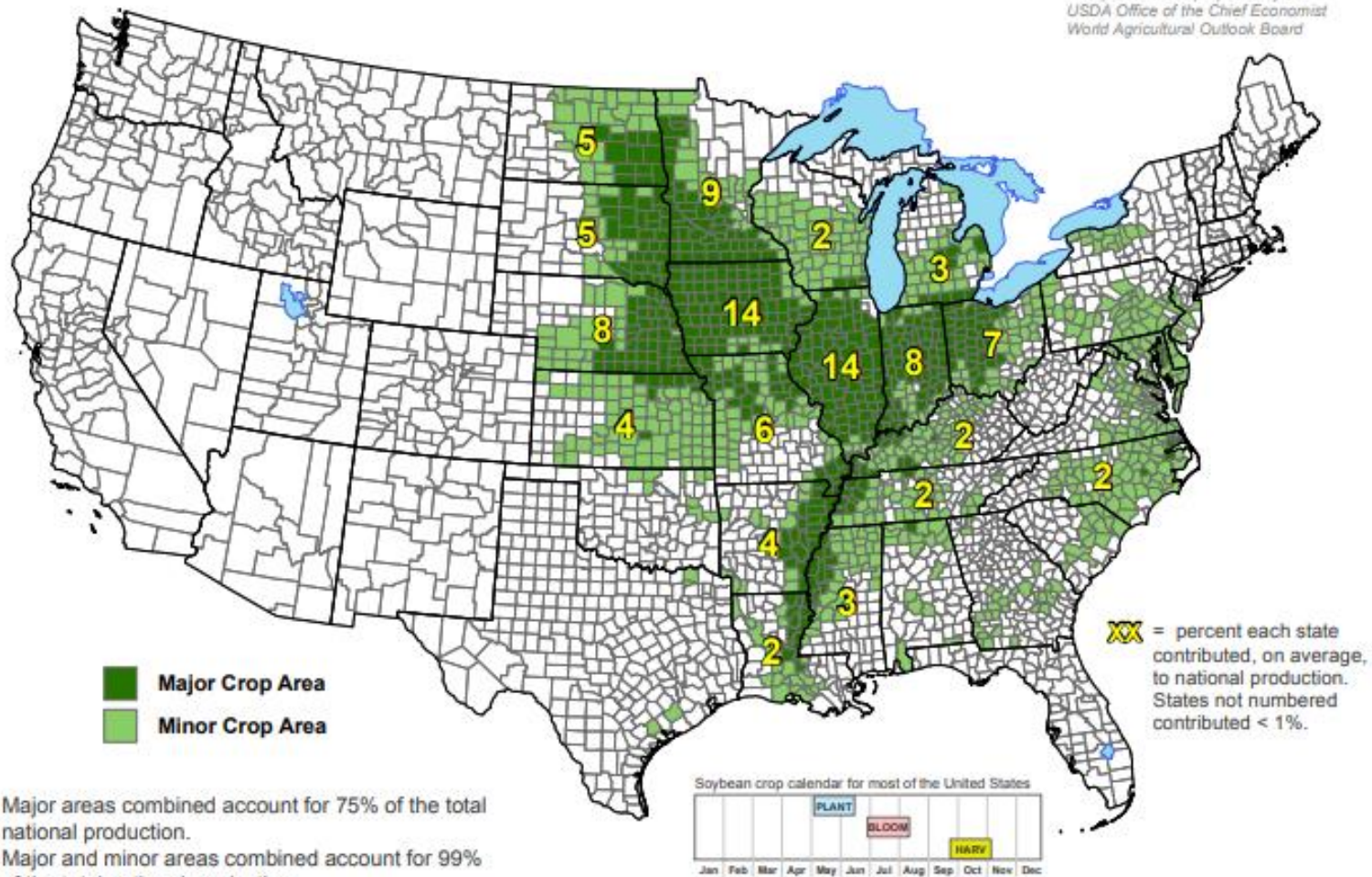
U.S Yields

- Estimated at an all-time record of 52.8 bpa.
- Trend line adds about 0.4 bpa/yr.
- Top five national average yields
 - 1) 2018 – 52.8
 - 2) 2016 – 52.0
 - 3) 2017 – 49.1
 - 4) 2015 – 48.0
 - 5) 2014 – 47.5

| | Avg. 2013-2017 | 2018 | Difference |
|--------------------|----------------|-------------|------------|
| ALABAMA | 40.5 | 44.0 | 3.5 |
| ARKANSAS | 48.0 | 50.0 | 2.0 |
| FLORIDA | 38.4 | na | na |
| GEORGIA | 39.1 | 40.0 | 0.9 |
| KENTUCKY | 49.9 | 57.0 | 7.1 |
| LOUISIANA | 49.7 | 50.0 | 0.3 |
| MISSISSIPPI | 49.0 | 53.0 | 4.0 |
| N. CAROLINA | 36.1 | 38.0 | 1.9 |
| OKLAHOMA | 29.5 | 31.0 | 1.5 |
| S. CAROLINA | 31.8 | 32.0 | 0.2 |
| TENNESSEE | 46.7 | 51.0 | 4.3 |
| TEXAS | 31.6 | 34.0 | 2.4 |
| VIRGINIA | 38.5 | 43.0 | 4.5 |

United States: Soybeans

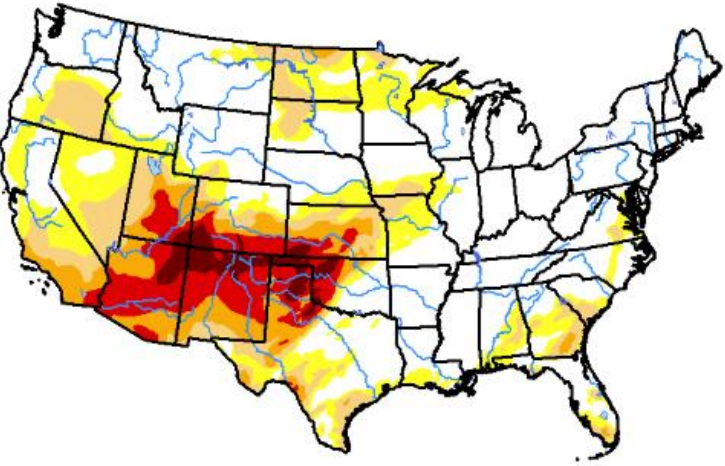
This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



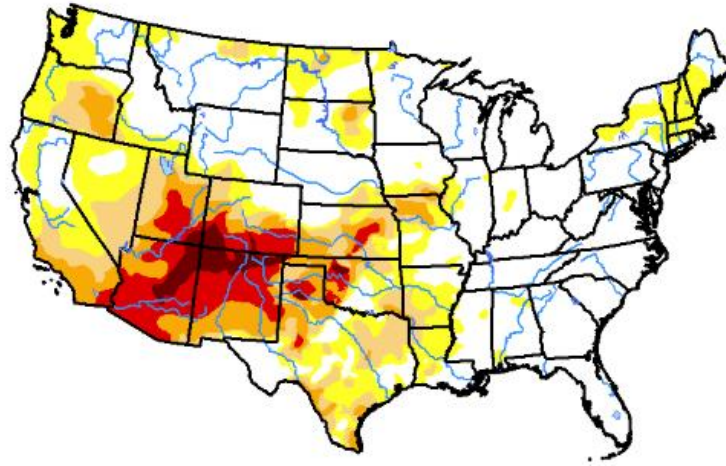
- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.

The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

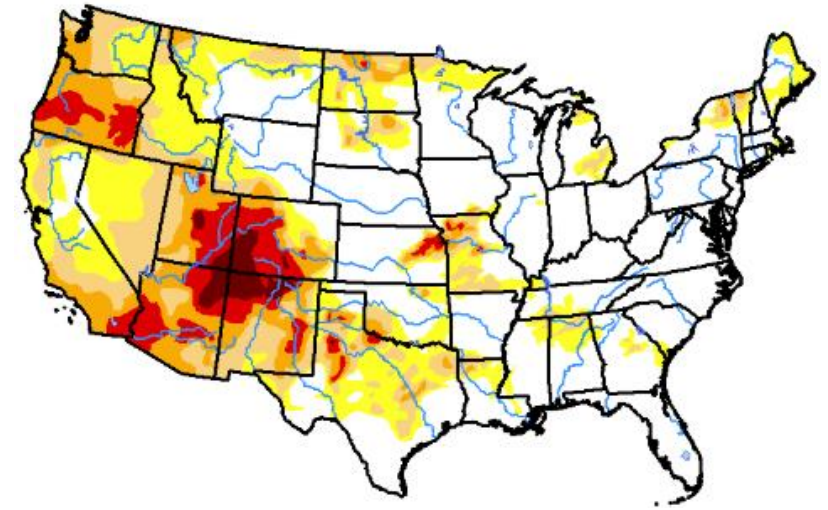
May 15



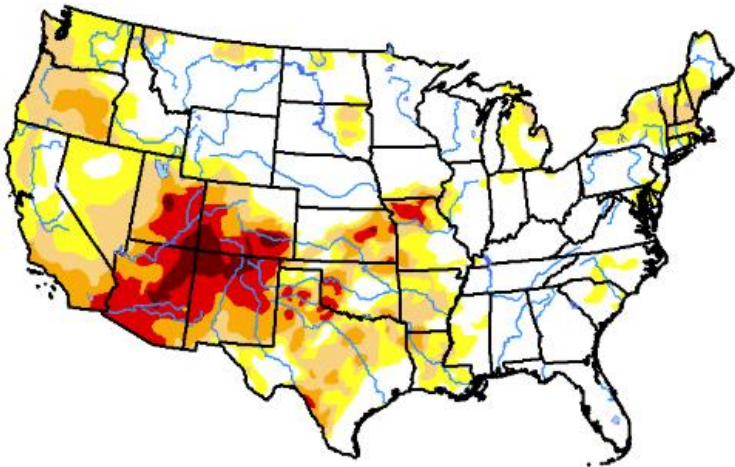
June 19



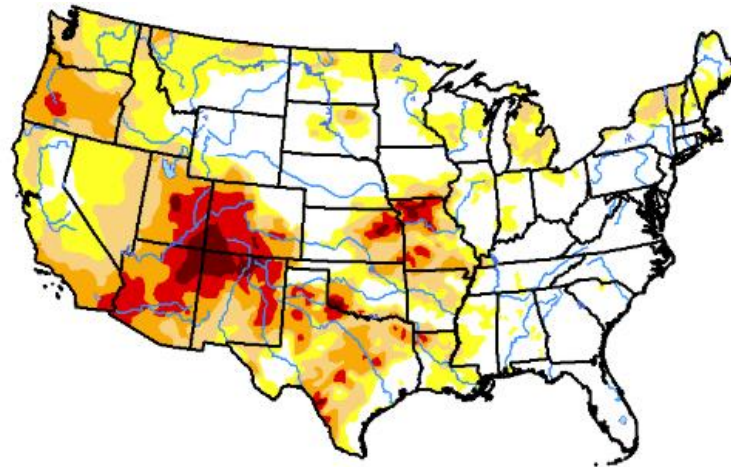
September 18



July 17

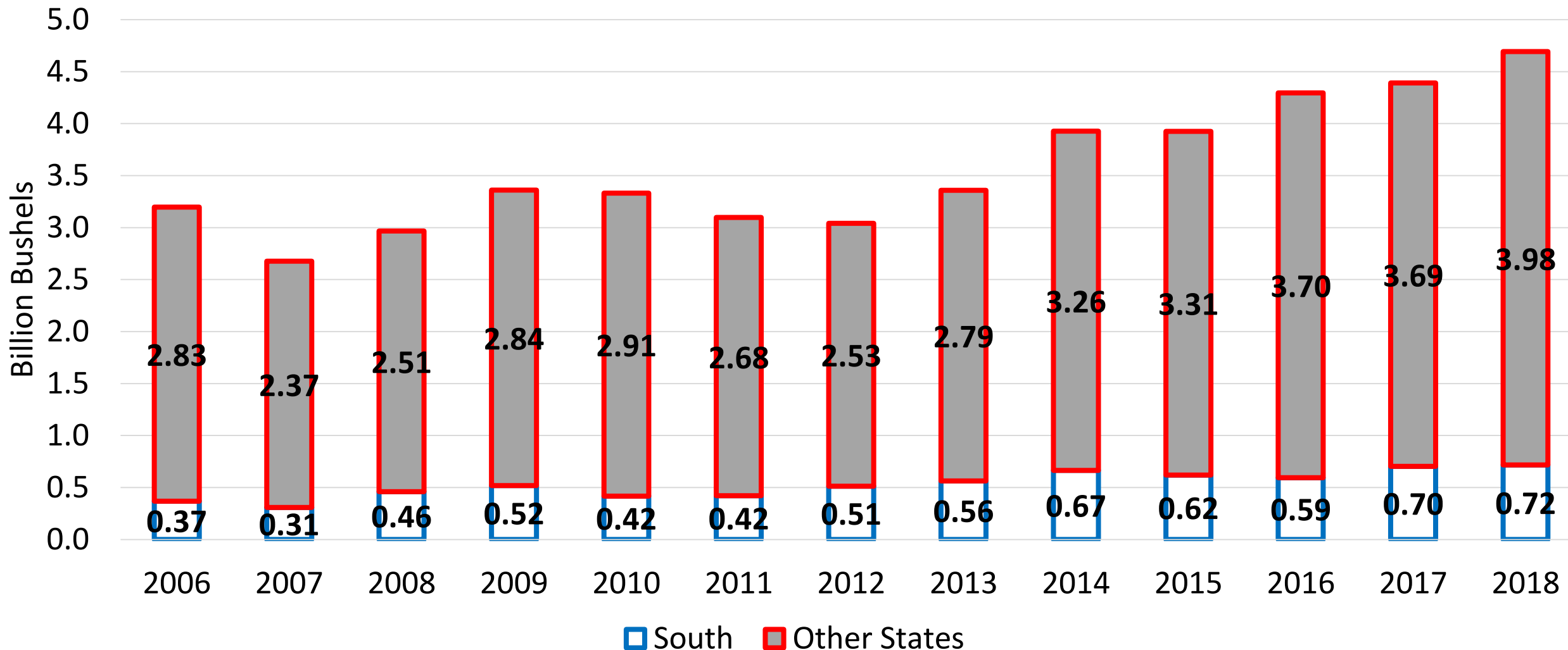


August 14

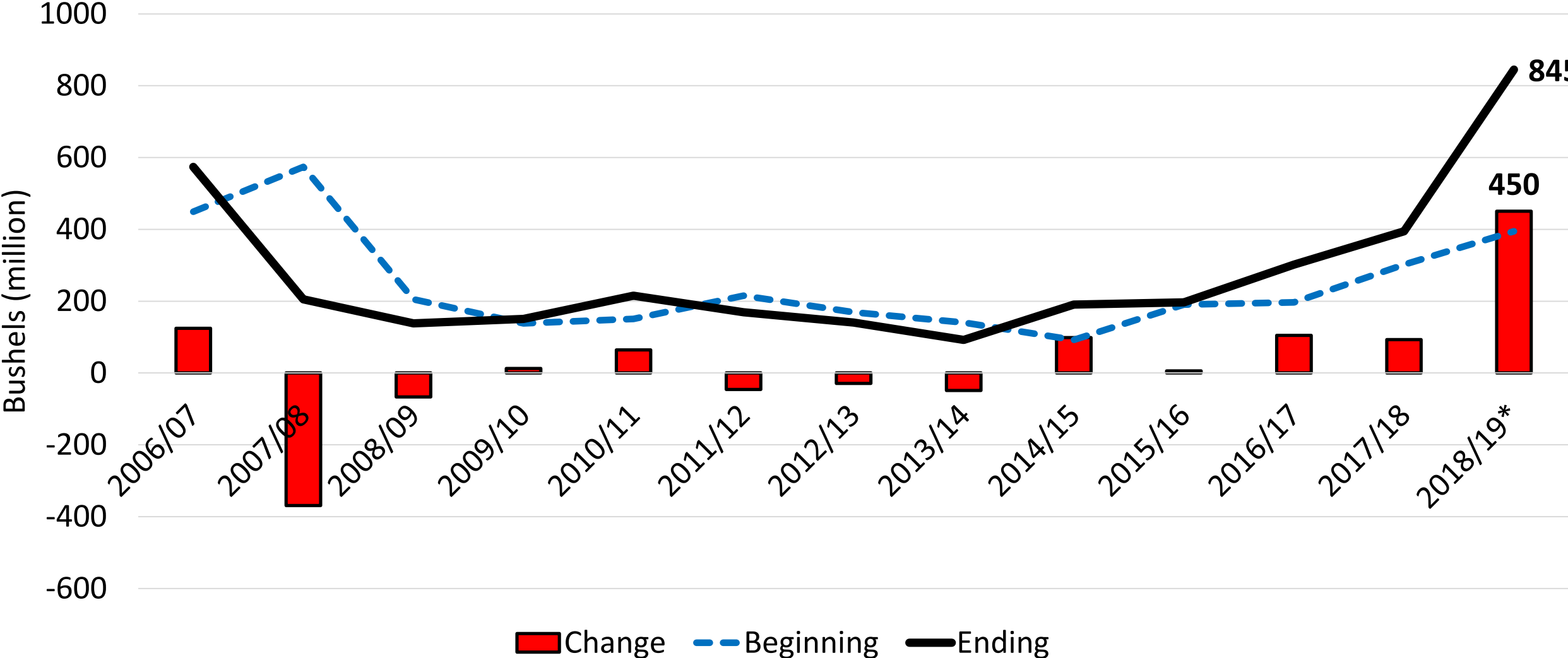


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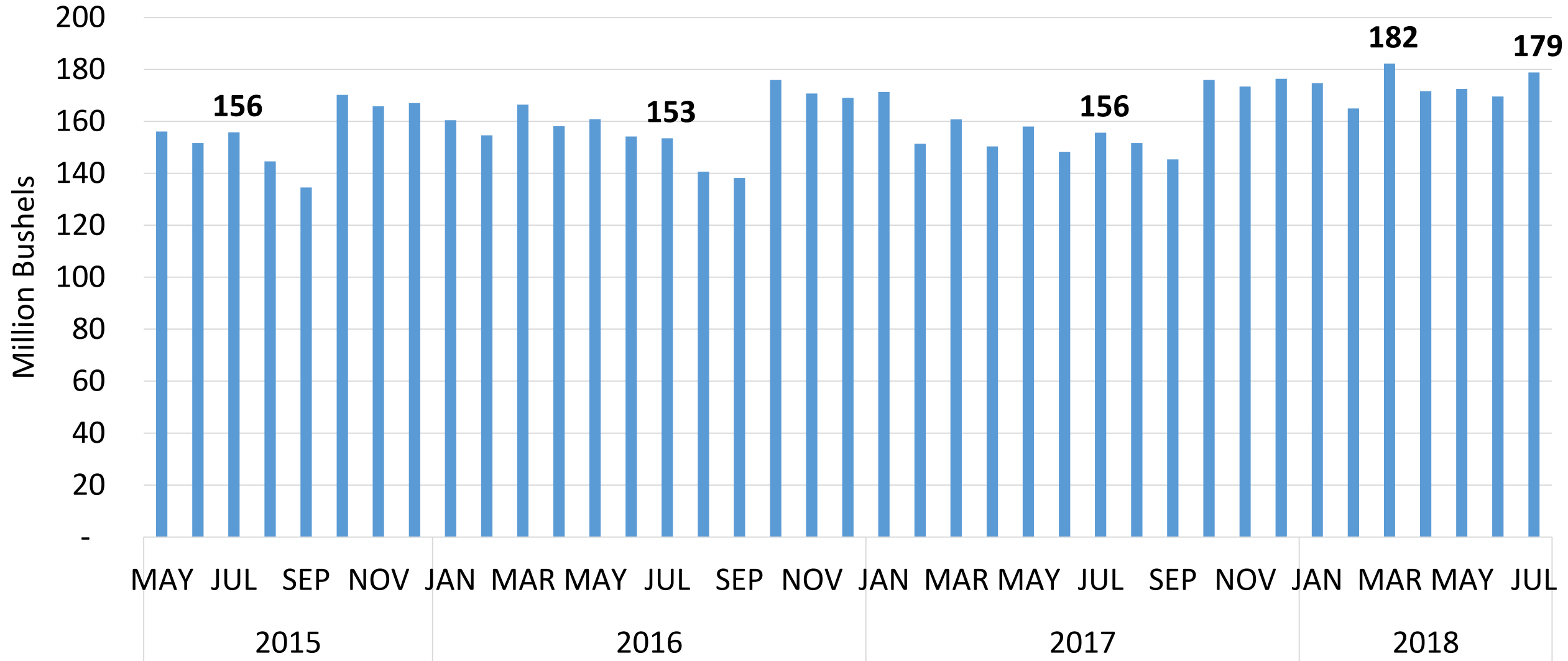
U.S. Soybean Production, 2006-2018



U.S. Soybean Stocks, 2006/07-2018/19

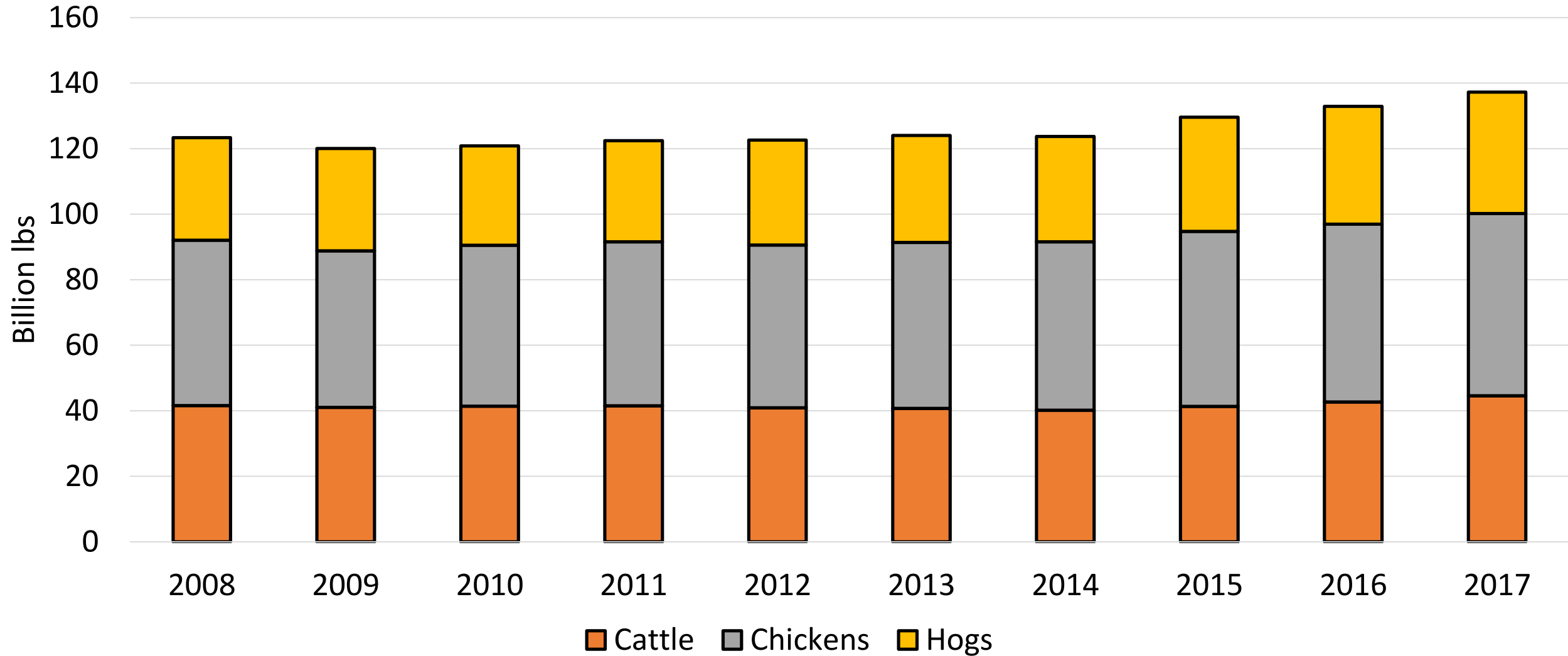


U.S. Monthly Soybean Crush, 2015-2018



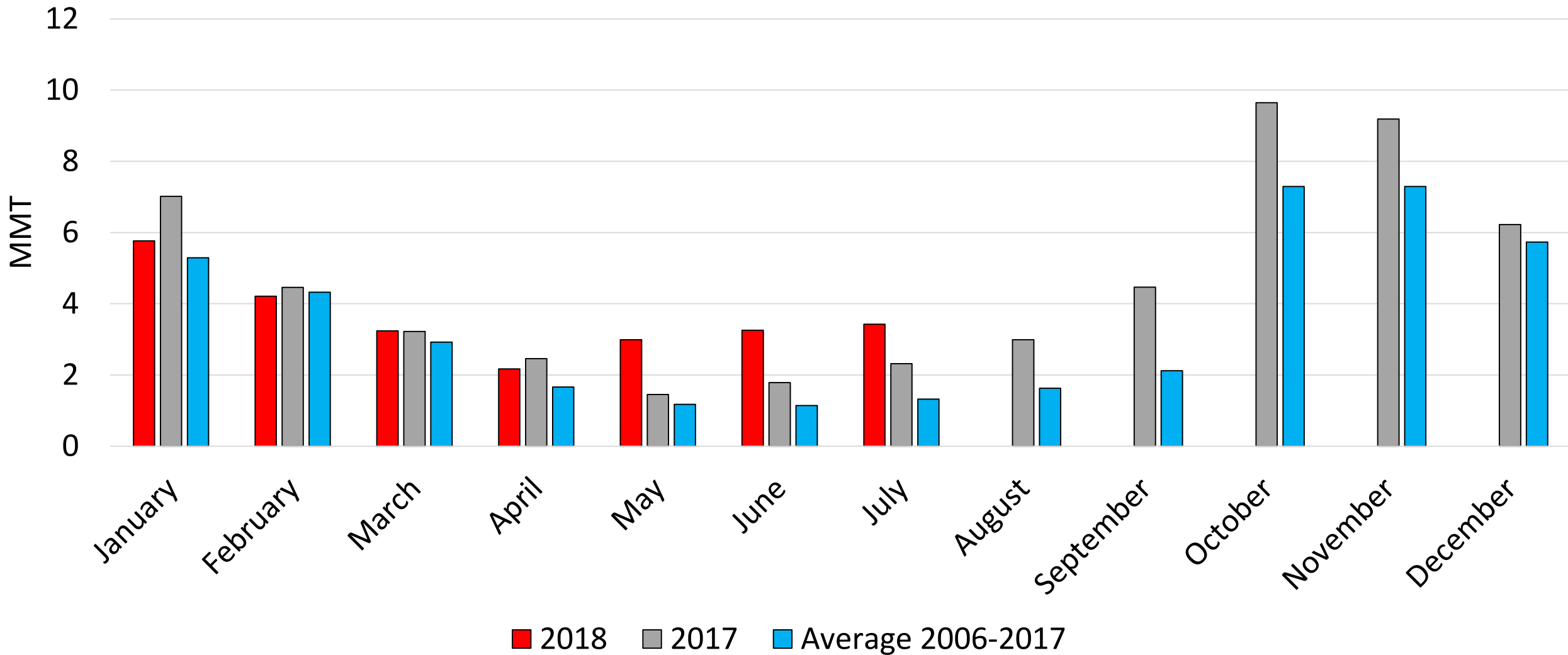
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U.S. Livestock Production, 2008-2017

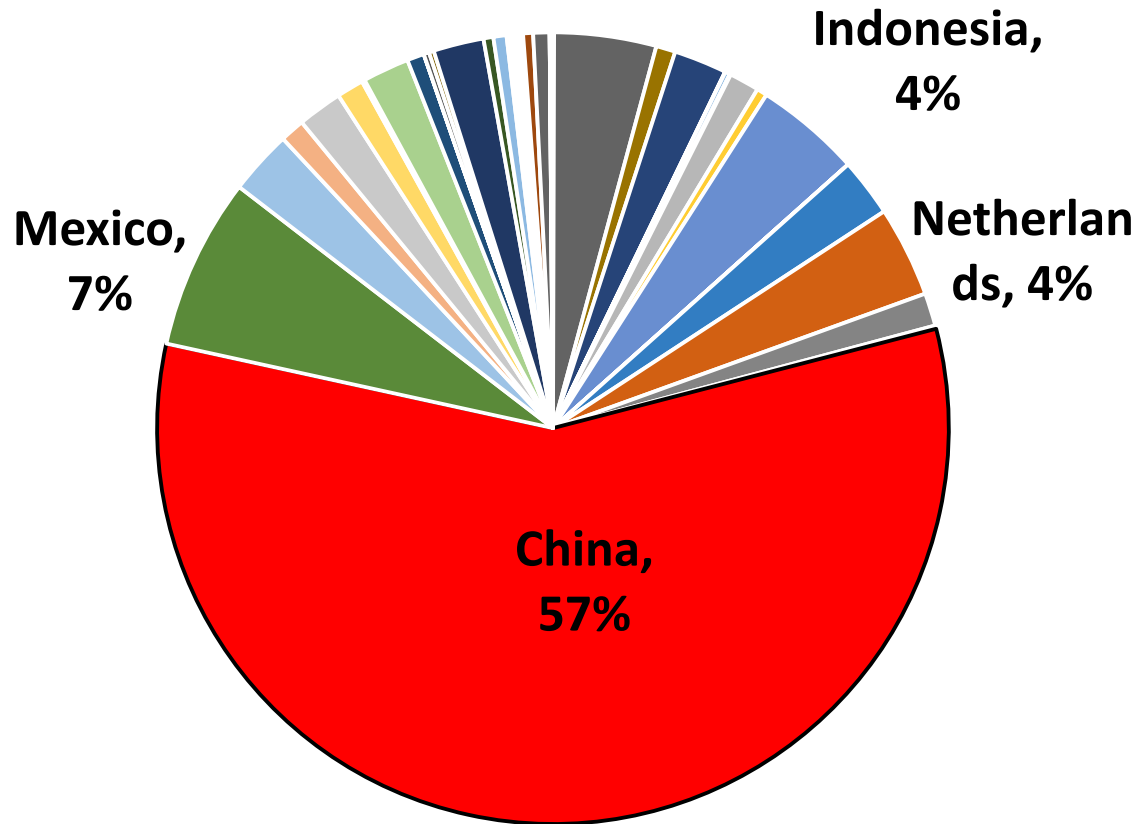


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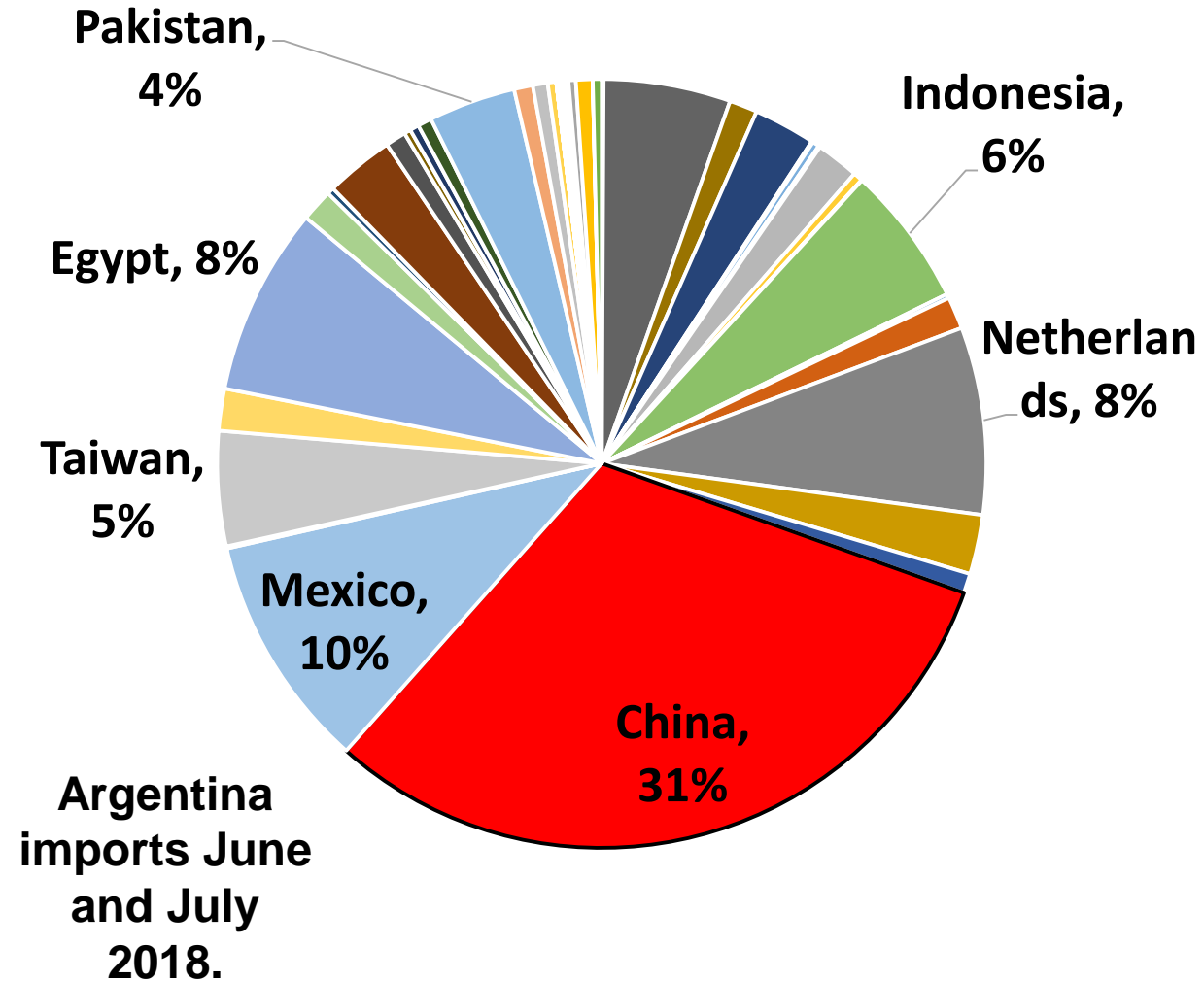
U.S. Soybean Exports MT per Month, 2006-2017 AVG, 2017, and 2018



U.S. Soybean Exports, 2017 (2.03 Billion Bushels)



U.S. Soybean Exports, 2018 (Jan-July)(920 Million Bushels)



| | 2014/15 | 2015/16 | 2016/17 | 2017/18 Est. | 2018/19 Proj. Sept | Change 17/18 to 18/19 |
|--|--------------|--------------|--------------|--------------|-----------------------|--------------------------|
| Planted and Harvested Acres & Yield | | | | | | |
| Acres Planted (Million) | 83.3 | 82.7 | 83.4 | 90.1 | 89.6 | -0.5 |
| Acres Harvested (Million) | 82.6 | 81.7 | 82.7 | 89.5 | 88.9 | -0.6 |
| U.S. Yield (bu/acre) | 47.5 | 48 | 52 | 49.1 | 52.8 | 3.7 |
| Supply (Million Bushels) | | | | | | |
| Beg. Stocks | 92 | 191 | 197 | 302 | 395 | 93 |
| Production | 3,927 | 3,926 | 4,296 | 4,392 | 4,693 | 301 |
| Total Supply | 4,052 | 4,140 | 4,515 | 4,715 | 5,113 | 398 |
| Use & Ending Stocks (Million Bushels) | | | | | | |
| Crushing | 1,873 | 1,886 | 1,901 | 2,055 | 2,070 | 15 |
| Exports | 1,842 | 1,942 | 2,166 | 2,130 | 2,060 | -70 |
| Seed and Residual | 146 | 115 | 146 | 136 | 137 | 1 |
| Total Use | 3,862 | 3,944 | 4,214 | 4,321 | 4,268 | -53 |
| U.S. Ending Stocks | 191 | 197 | 302 | 395 | 845 | 450 |
| Price and Stocks to Use Ratio | | | | | | |
| U.S. Avg. Price (\$/bu) | \$10.10 | \$8.95 | \$9.47 | \$9.35 | \$7.35-\$9.85 | -\$0.75 |
| U.S. Stocks/Use | 4.95% | 4.99% | 7.17% | 12.66% | 19.80% | 7.14% |

Domestic Supply and Demand Considerations

- Supplies are at all time highs.
- Domestic demand remains strong.
- Changing export markets.
 - Increase EU exports
 - Exports to Argentina
- 2019 plantings will be lower with current price levels.
- Future of dicamba and new seed technologies.



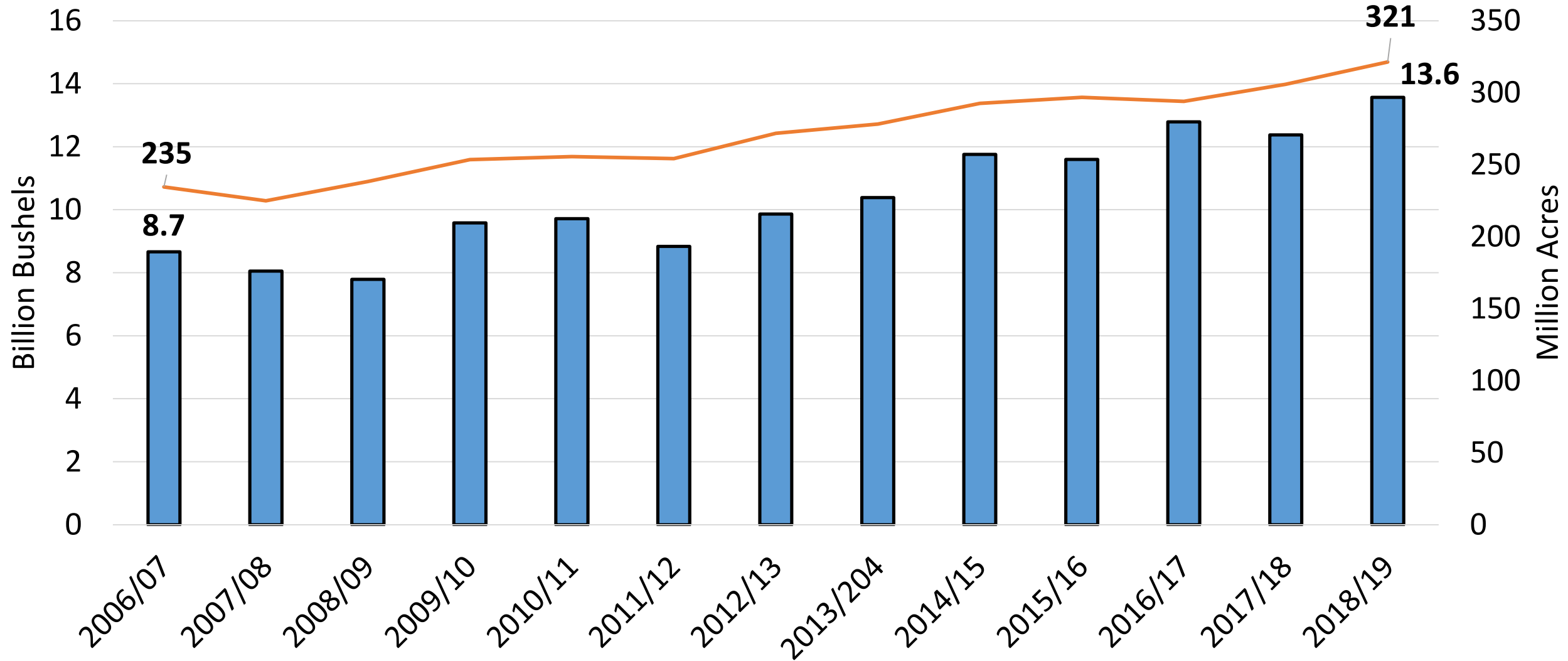
Strong Demand / Approaching Over Supply?

WORLD SUPPLY AND DEMAND

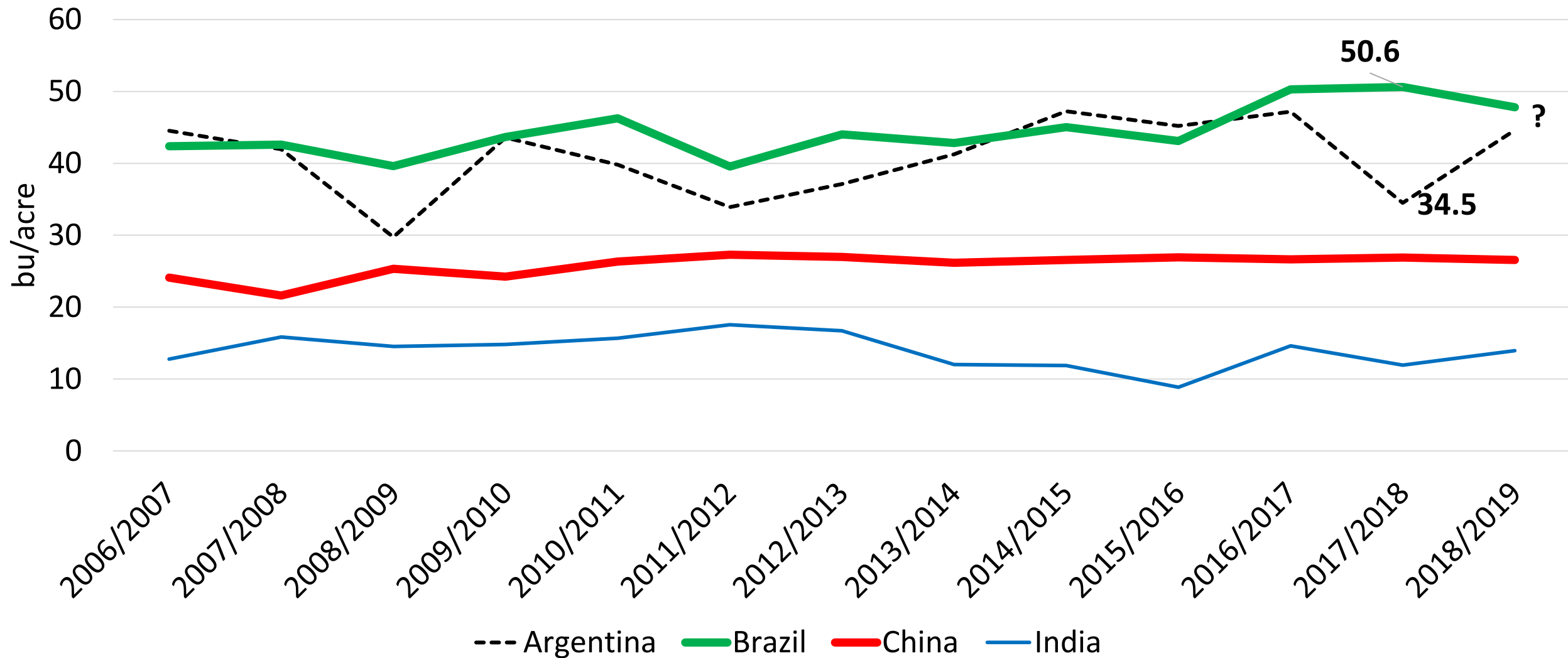
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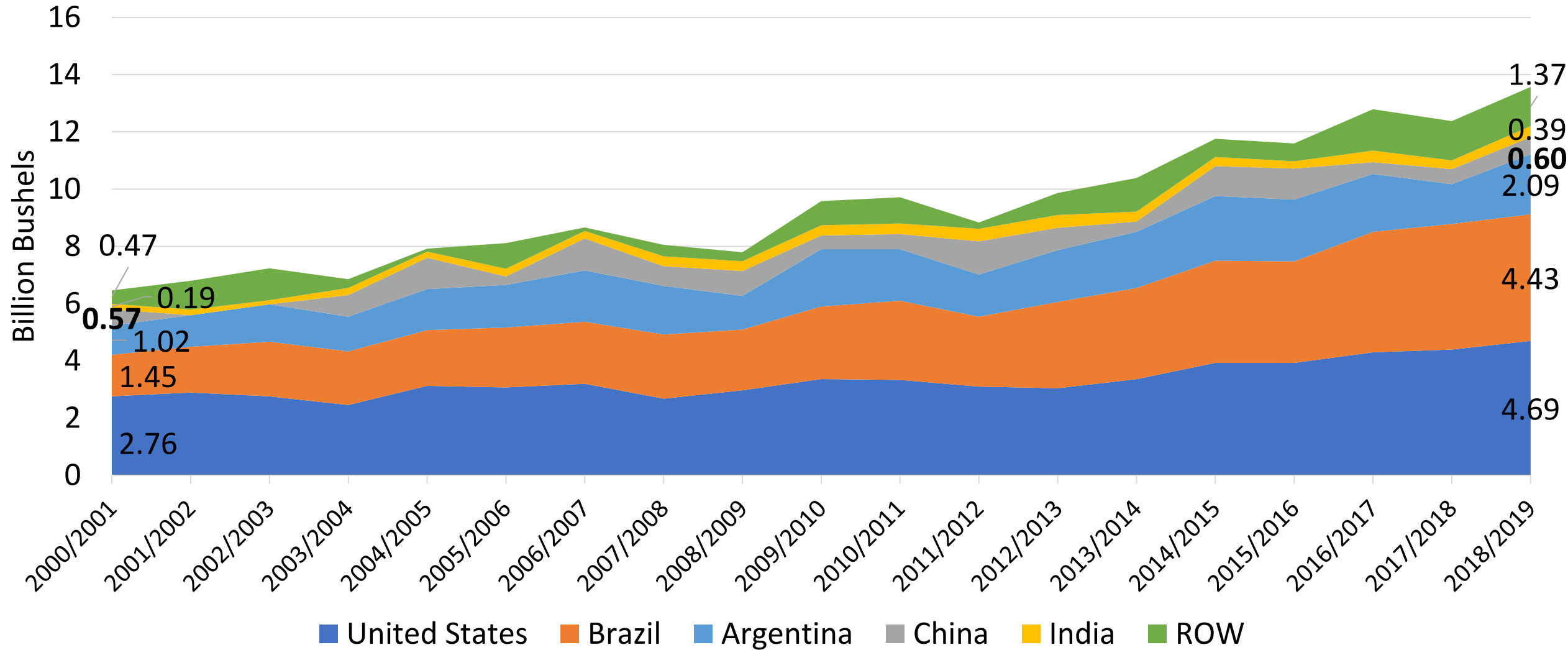
World Soybean Harvested Acres and Production, 2006/07 to 2018/19



Soybean Yields, 2006/07 to 2018/19

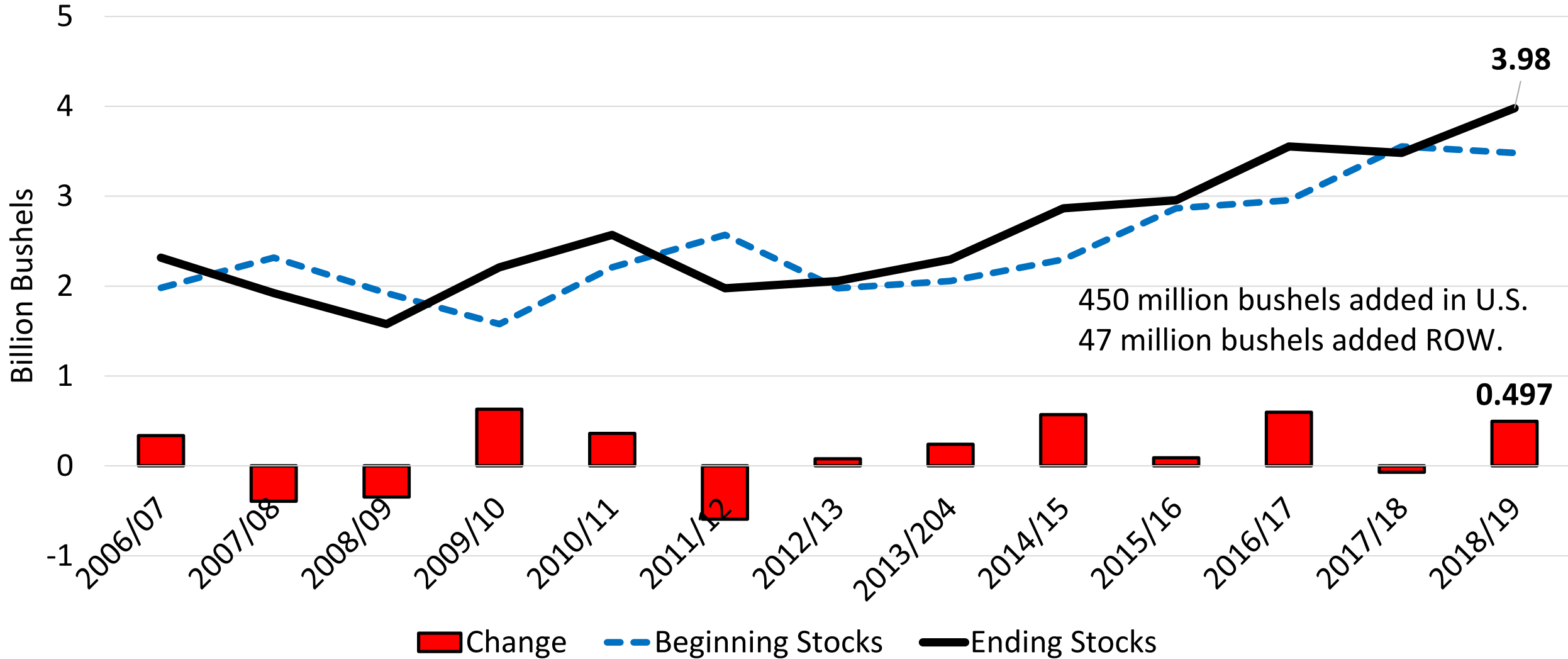


Global Soybean Production, 2006/07-2018/19

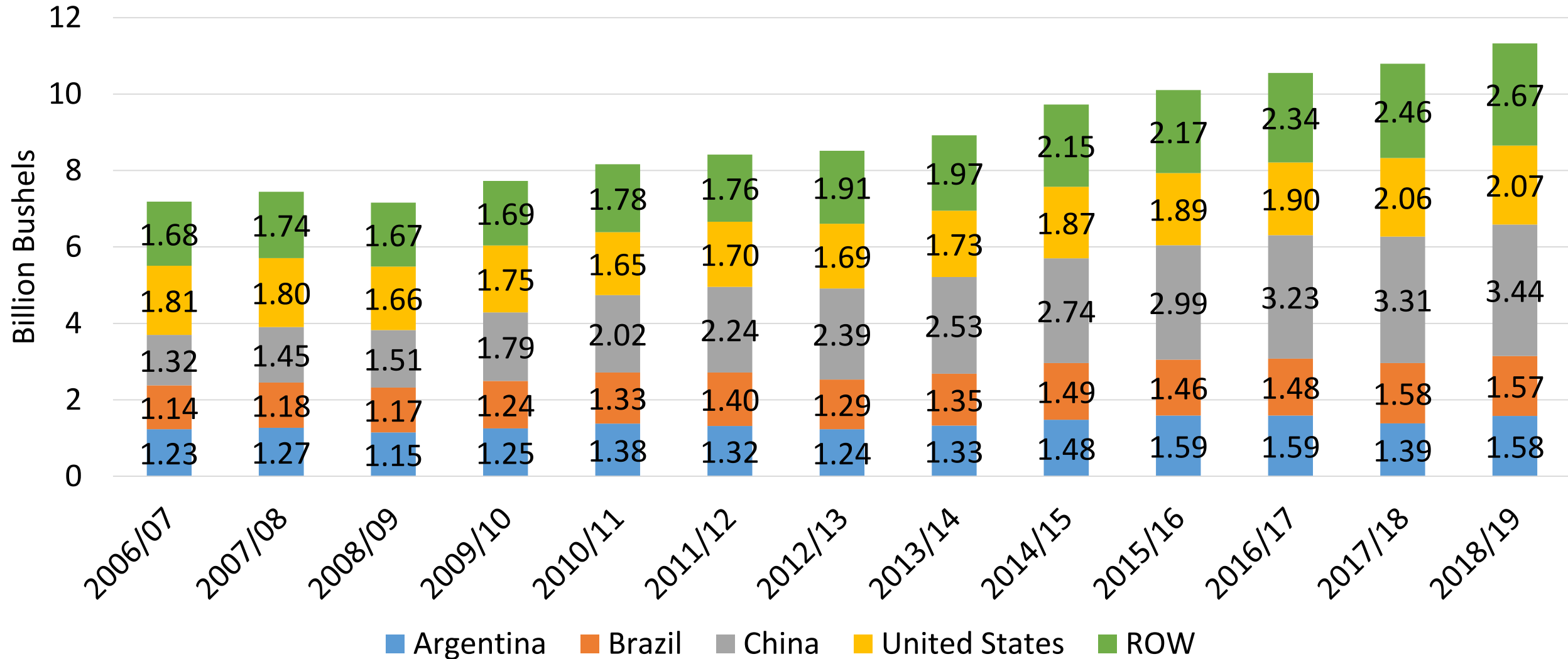


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World Soybean Stocks, 2006/07-2018/19

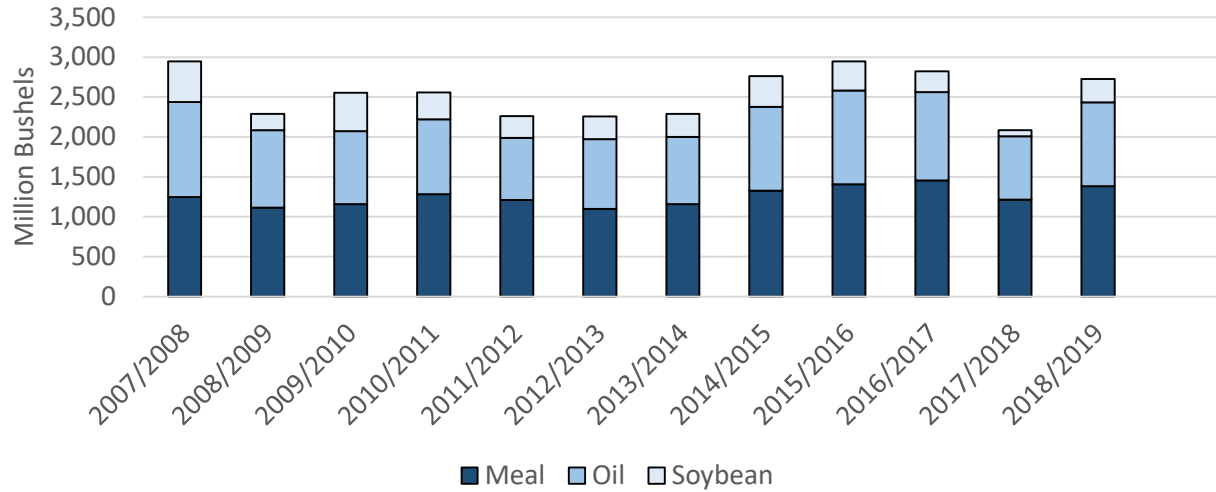


World Soybean Crush, 2006/07-2018/19

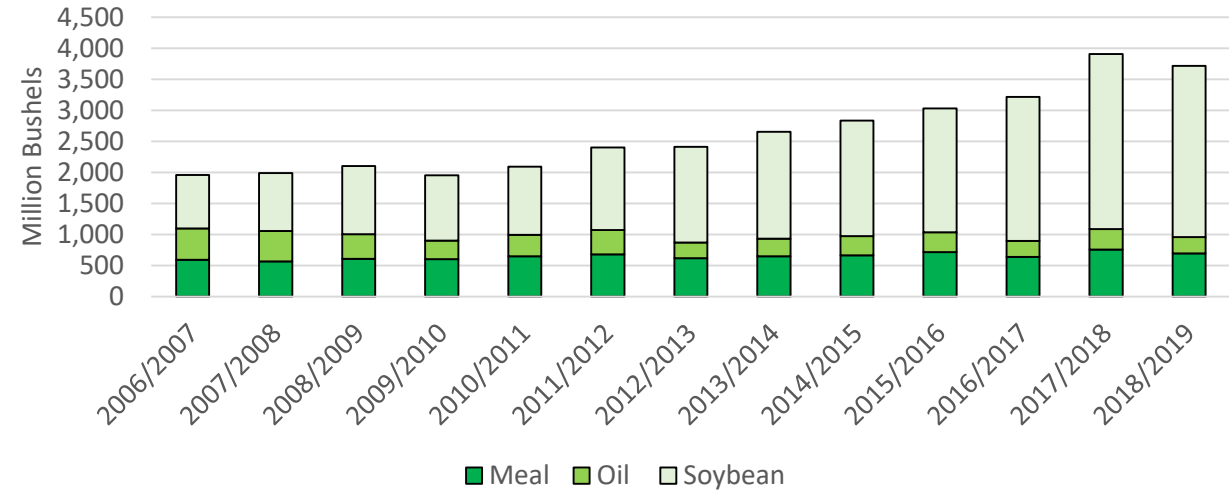


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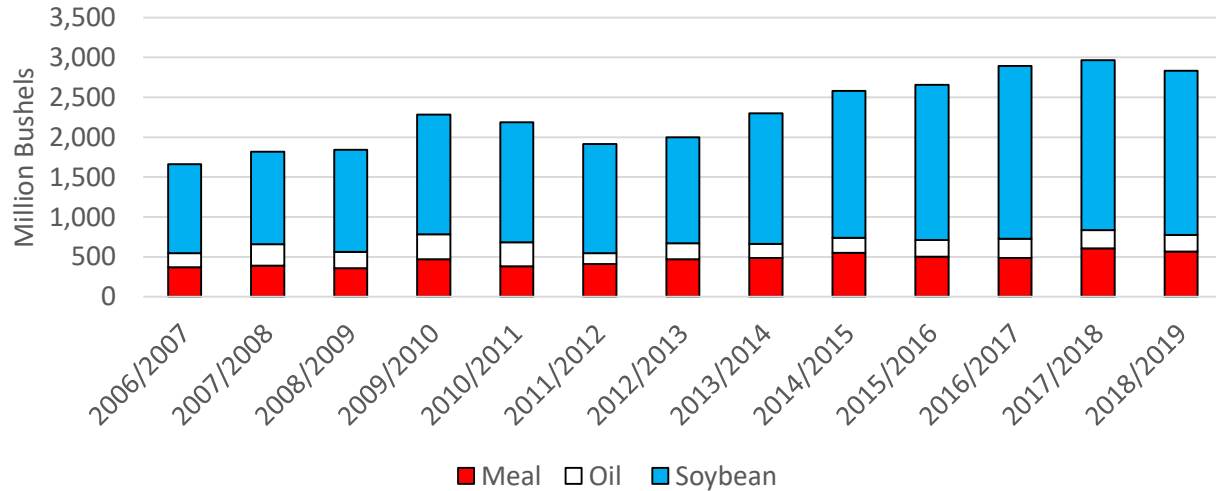
Argentina Soybean Exports in Bushel Equivalents, 2006/07-2018/19



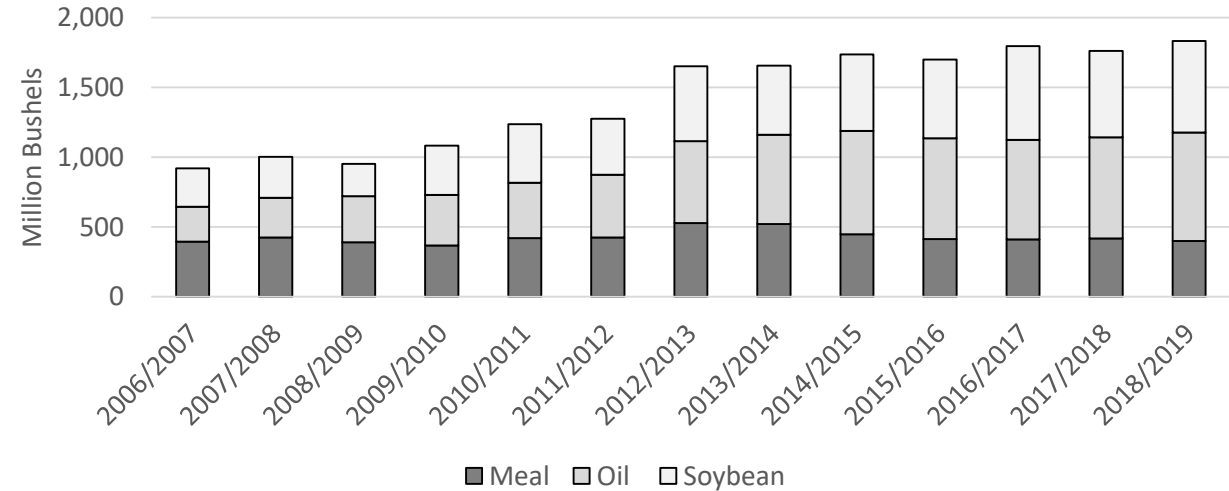
Brazil Soybean Exports in Bushel Equivalents, 2006/07-2018/19



U.S. Soybean Exports in Bushel Equivalents, 2006/07-2018/19



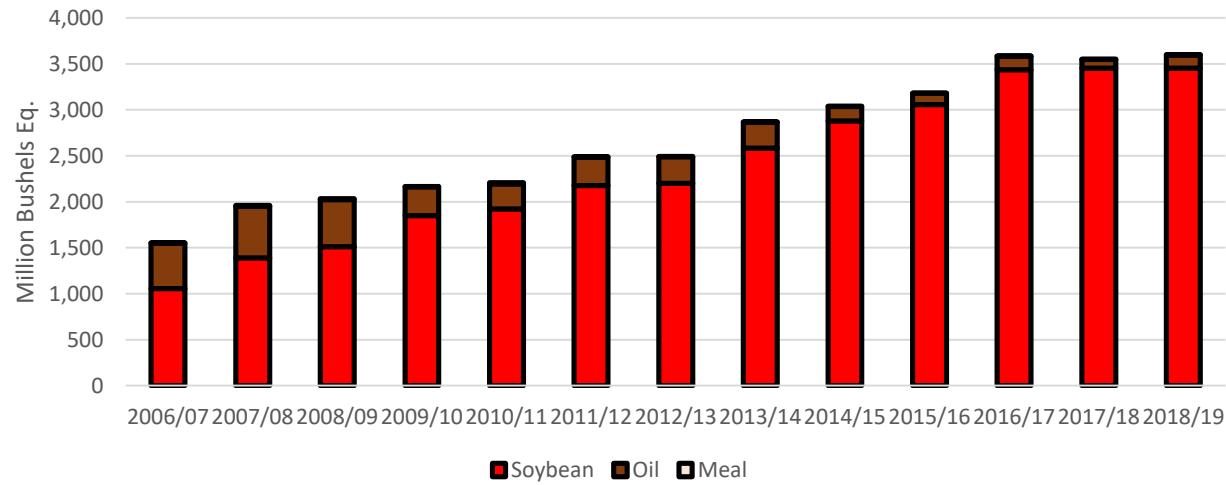
ROW Soybean Exports in Bushel Equivalents, 2006/07-2018/19



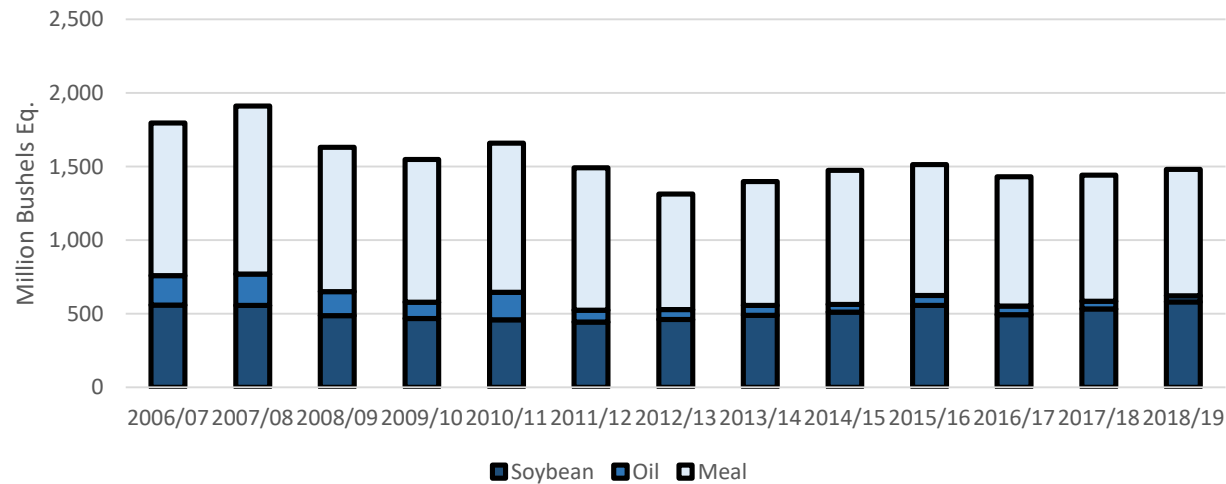
China – U.S. Relations

- On September 12 USDA announced record soybean yields. On the same day, China indicated soybean imports would fall 10% year-over-year to 83.5 MMT (USDA's current projection is 94 MMT).
- China strategy
 - 1) promoting lower-protein feeds;
 - 2) utilizing competing oilseed meals, such as canola meal; and
 - 3) increasing domestic production.

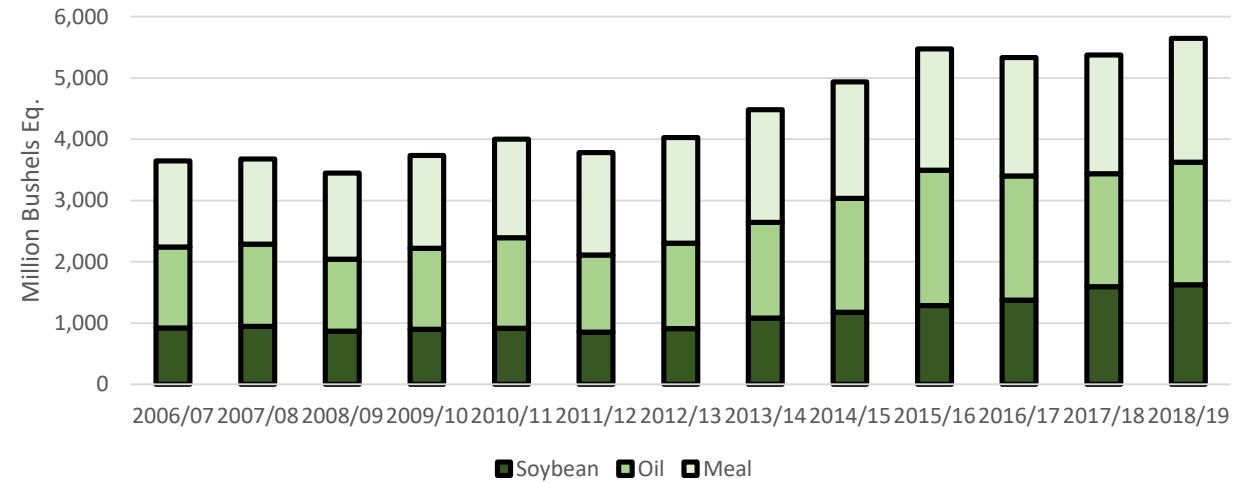
China Meal, Oil and Soybean Imports, 2006/07-2018/19



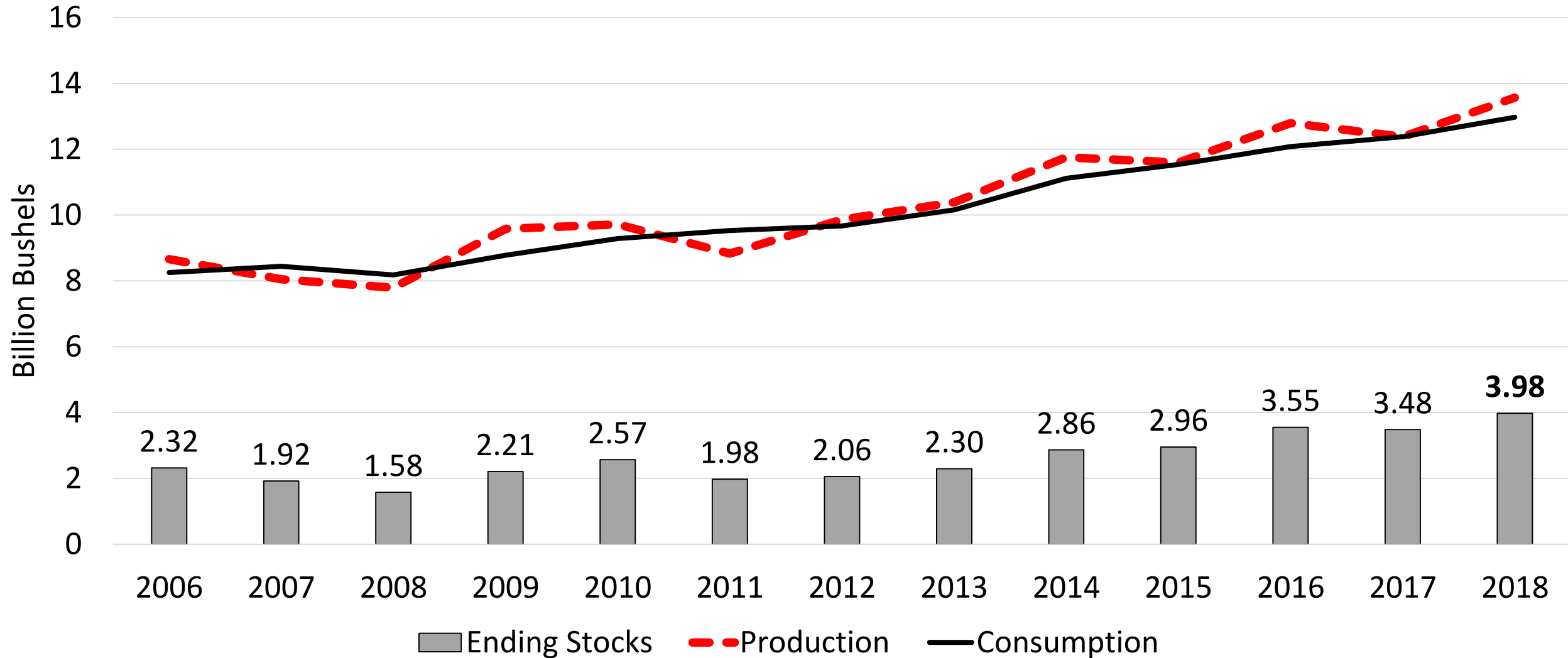
EU Meal, Oil and Soybean Imports, 2006/07-2018/19



ROW Meal, Oil and Soybean Imports, 2006/07-2018/19



World Soybean Production, Consumption, and Ending Stocks, 2006-2018



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Global Supply and Demand Considerations

- Argentina imports and tax structure
- Brazil planted acres / growing season
- U.S. access to China's market
- Reorganization of export structure?

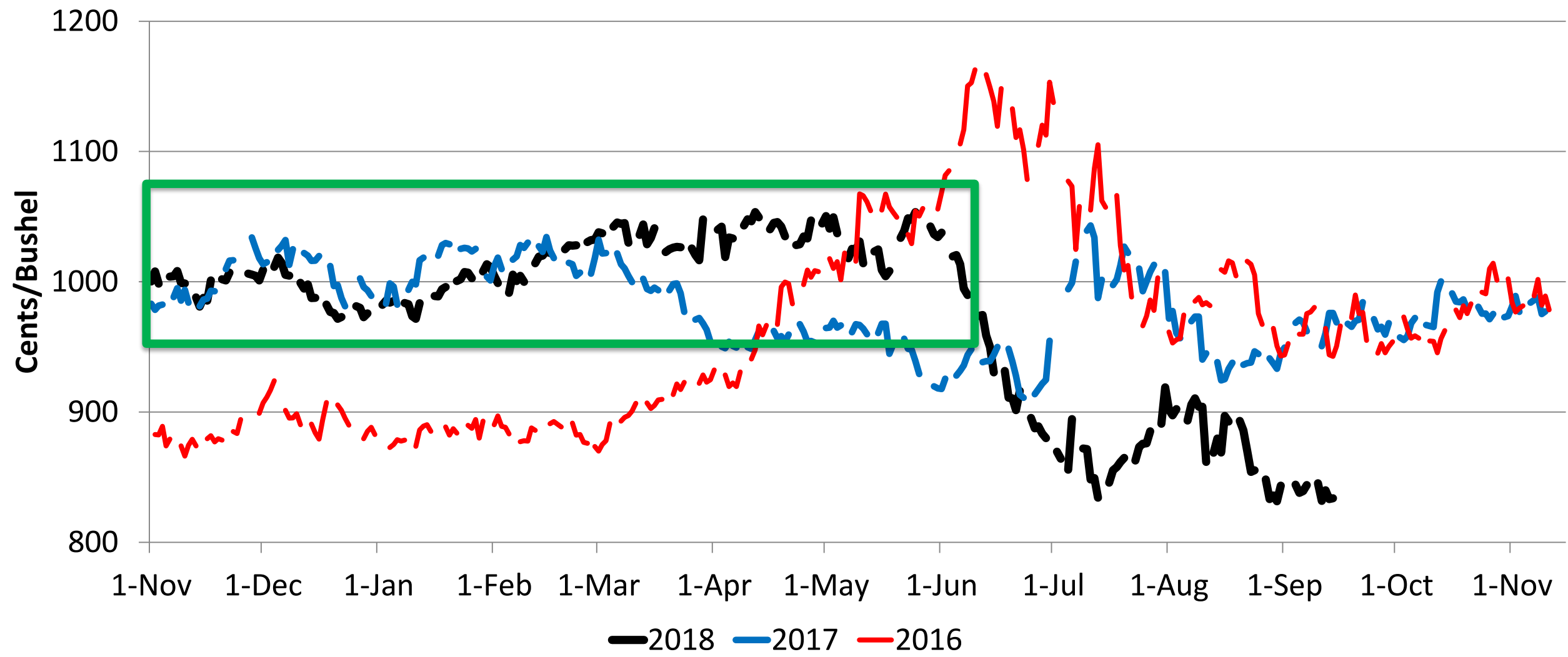
The Good, the Bad, and the Ugly?

PAST, PRESENT, AND FUTURE PRICES

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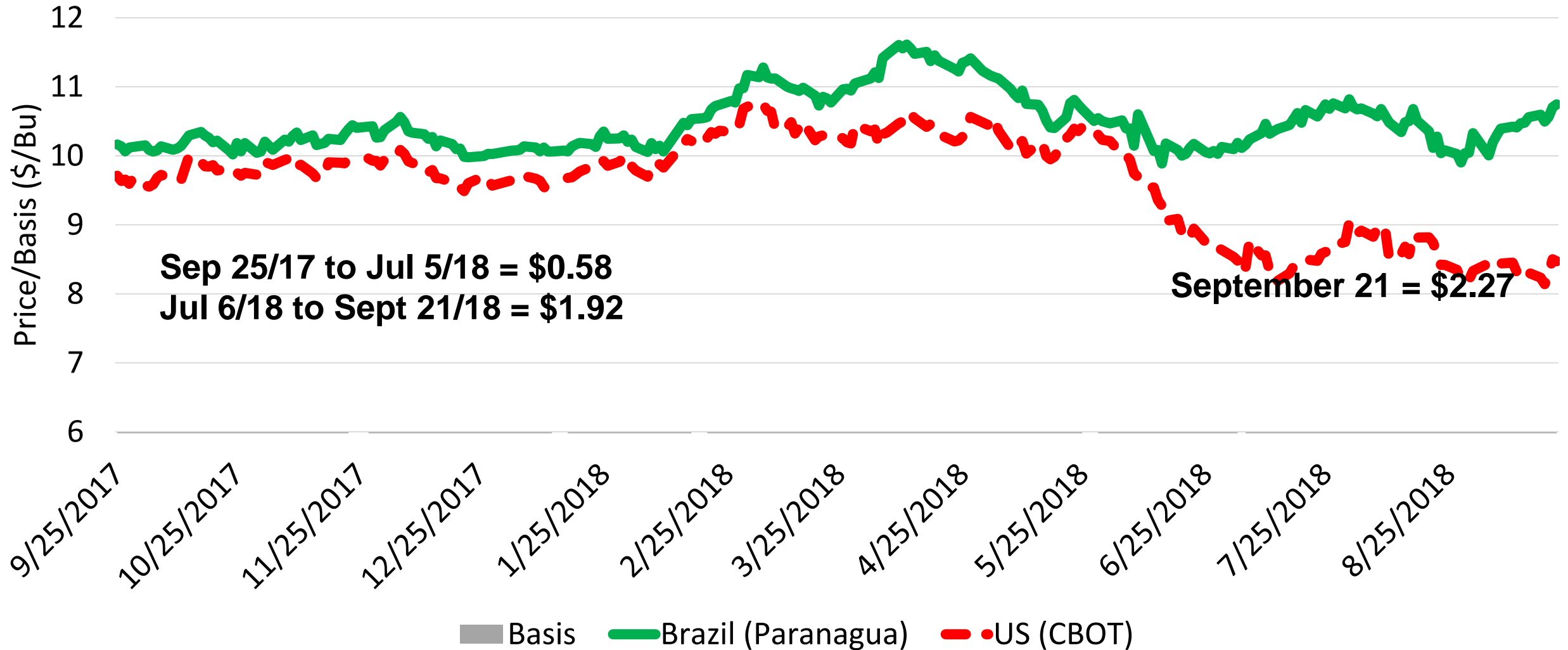
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November Soybean Futures



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Brazilian and CBOT Soybean Prices (\$/bu), 2017- 2018



Soybeans Nov '19 (ZSX19)

905-6 +13-4 (+1.51%) 11:04 CT [CBOT]

905-0 x 17 905-4 x 10

INTERACTIVE CHART for Thu, Sep 20th, 2018

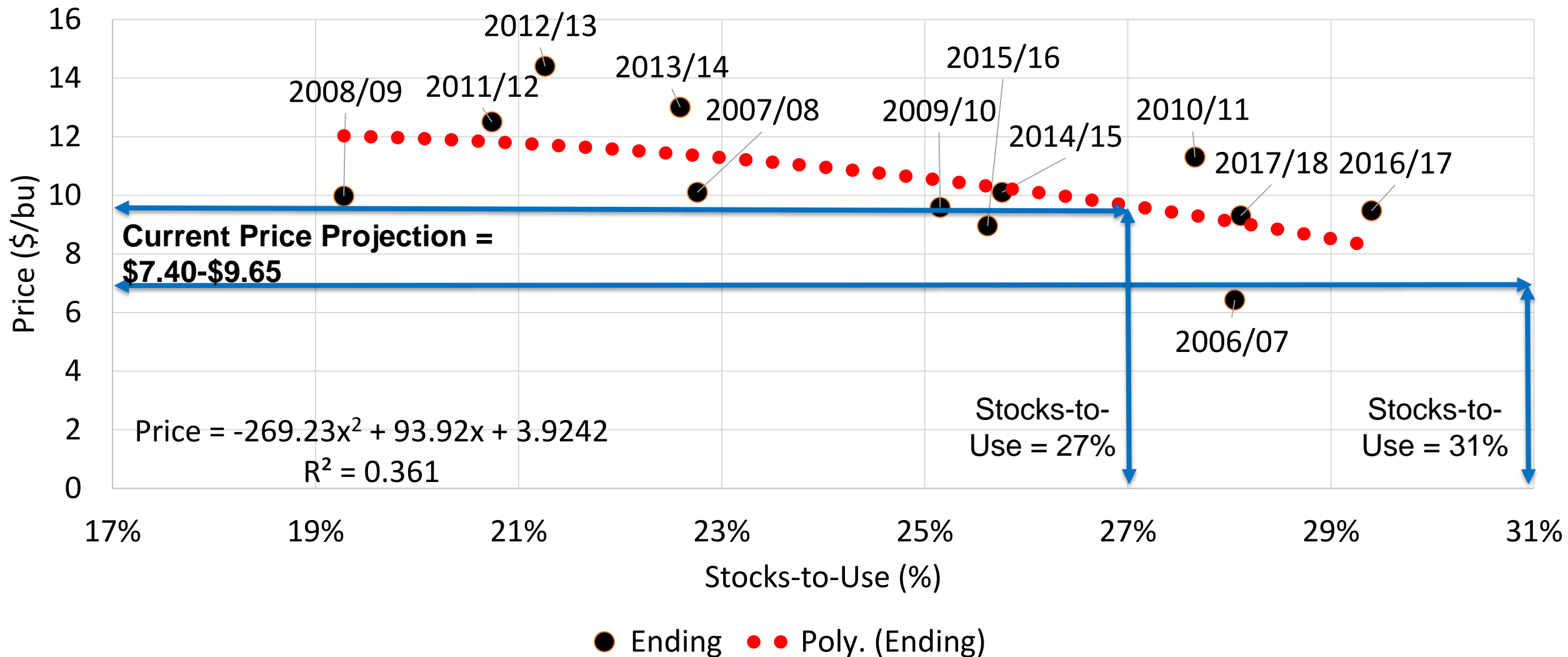
Alerts Watch Share Help

ZSX19 GO +Study Tools Settings 1D 5D 1M 3M 6M 1Y 5Y 20Y Daily 1Y Templates Clear

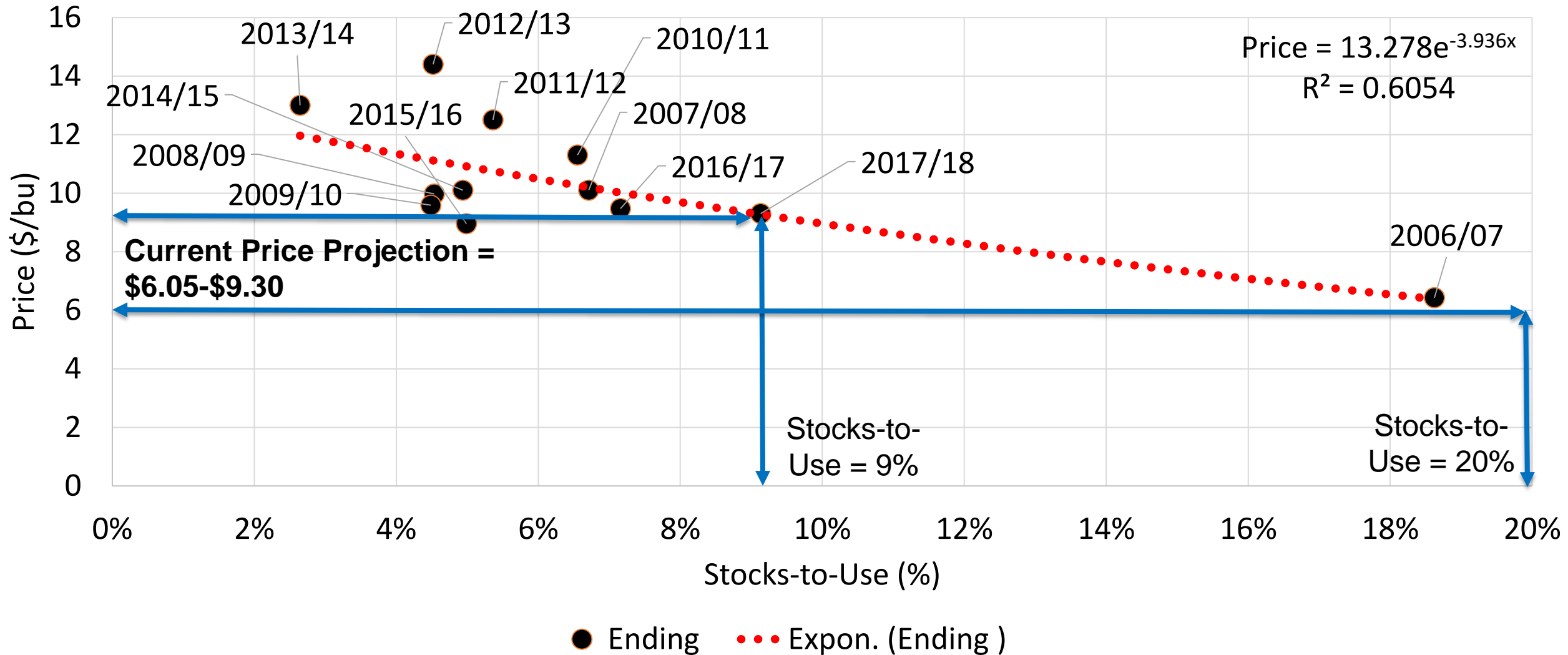


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World Stocks-to-Use to Price Relationship, 2006/07-2017/18



U.S. Stocks-to-Use to Price Relationship, 2006/07-2018/19

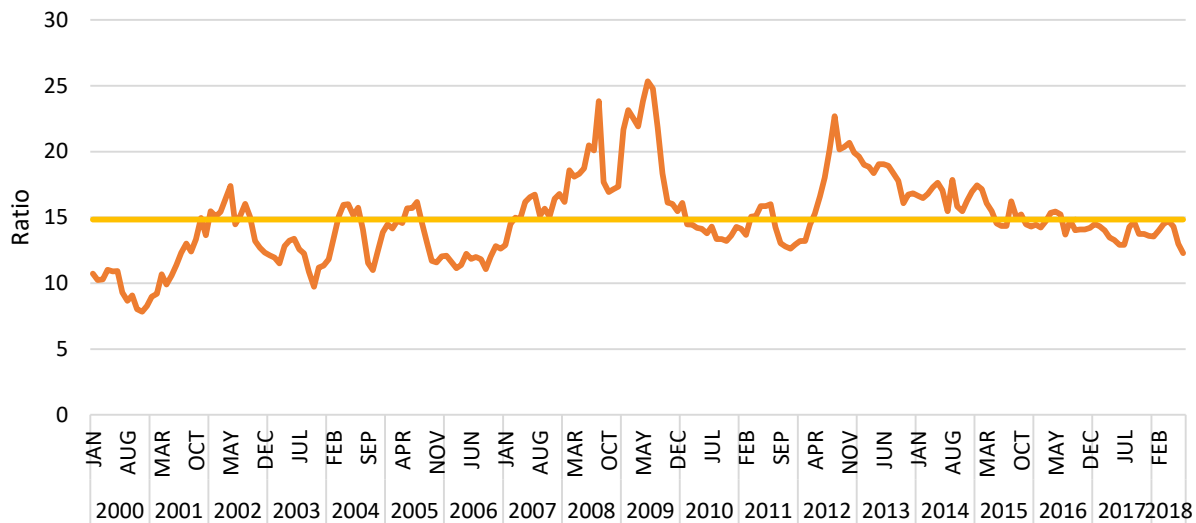


Where Are Prices Headed

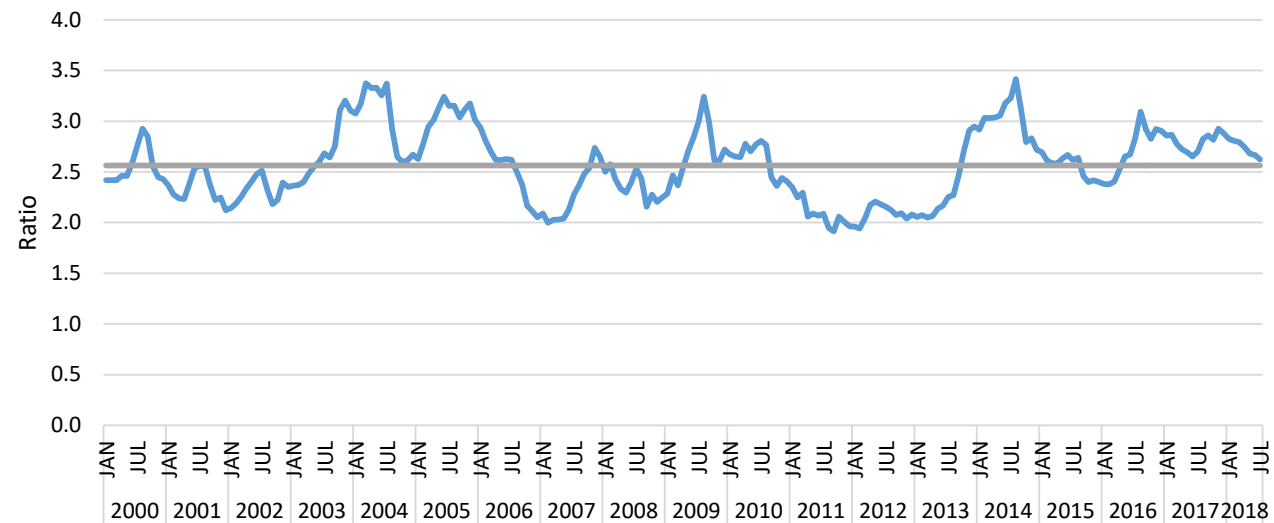
- My Best Guess 2018-2019 = \$7.40- \$9.30

| | 2018/19 | 2019/2020 | 2020/2021 |
|------------|----------------|------------------|------------------|
| FAPRI | \$8.73 | \$8.95 | \$9.29 |
| CBOT (Nov) | \$9.10 | \$9.26 | \$9.34 |
| CBO | \$9.35 | \$9.67 | \$9.81 |
| WASDE | \$8.60 | na | na |

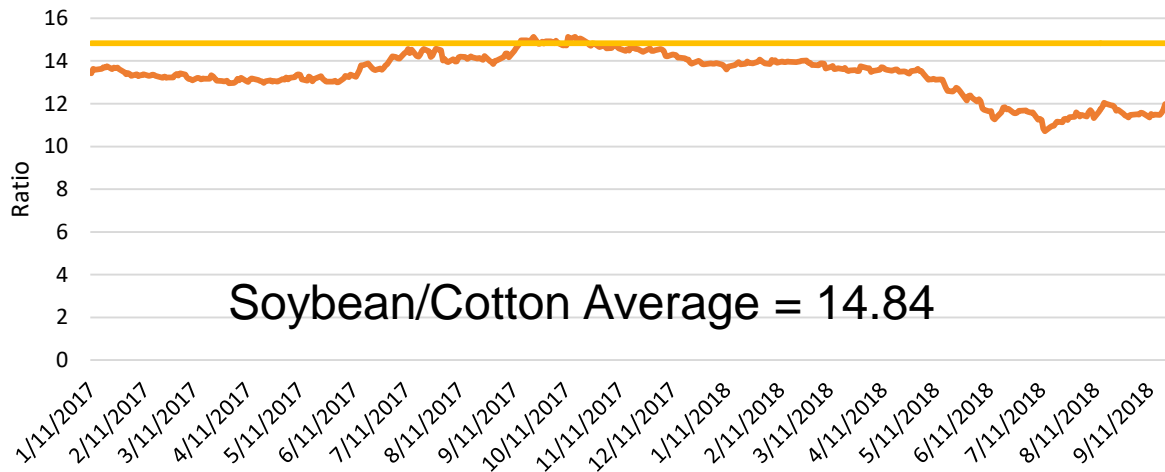
Soybean/Cotton Price Ratio, 2000-2018



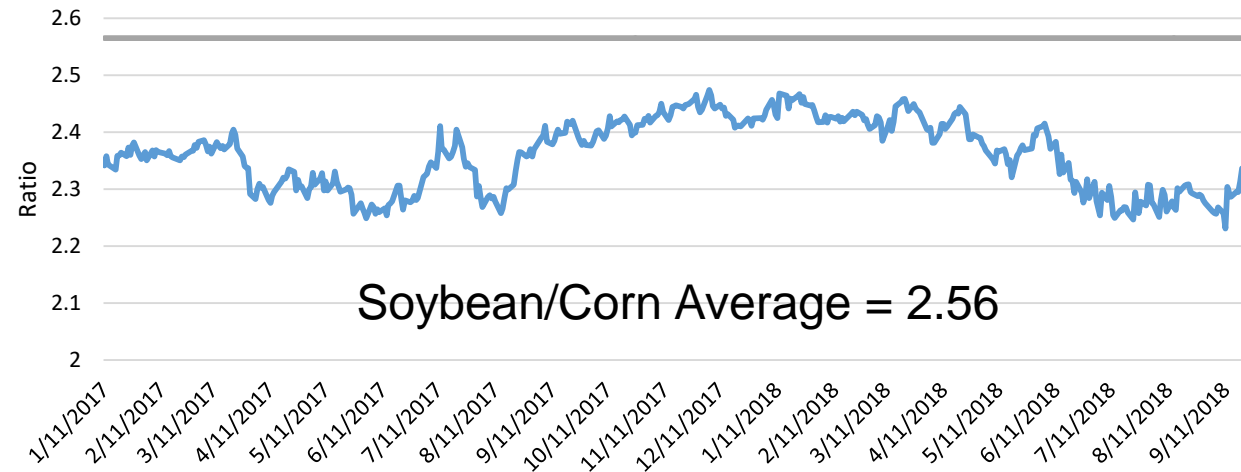
Soybean/Corn Price Ratio, 2000-2018



Nov 19 Soybean/Dec 19 Cotton Price Ratio, 2017-2018



Nov 19 Soybean/Dec 19 Corn Price Ratio, 2017-2018



Soybean/Cotton Average = 14.84

Soybean/Corn Average = 2.56

Price Considerations 2018-2019

- Currently, what is the tariff related price response versus production (and other factors).
- Lower than “normal” basis likely to persist into the winter.
- Trade uncertainty looks like it will continue.
- South American production will be essential for price direction.
- Soybean acres down, corn and cotton up if relative prices remain consistent.

2018 Revenue Example

- Depends how you marketed the crop.
 - Pre-June sales 50% of estimated production 47 bpa
 - $47 \times 0.5 \times \$10.00 = \$235/\text{acre}$
 - Harvest sales
 - $(51 - 23.5) = 27.5 \times \$7.80 = \$214.5/\text{acre}$
 - MFP payment
 - $51 \times 0.825 = \$42.07$
 - ARC = ? Depends on county; Additional MFP payment = ?.
 - Total = \$491.57 or \$9.64/bu
- 2019 may be the larger concern.

Concluding Thoughts

- Volatility and depressed price are likely to persist in 2018 and into 2019 as long as trade disruptions persist.
- What does the short/long term trade dynamic look like?
- What are the long term repercussions of the trade disruptions?
 - Loss in market share?
 - Expansion into other markets?
- Brazil and Argentina planting and crop progress will be important for price direction.

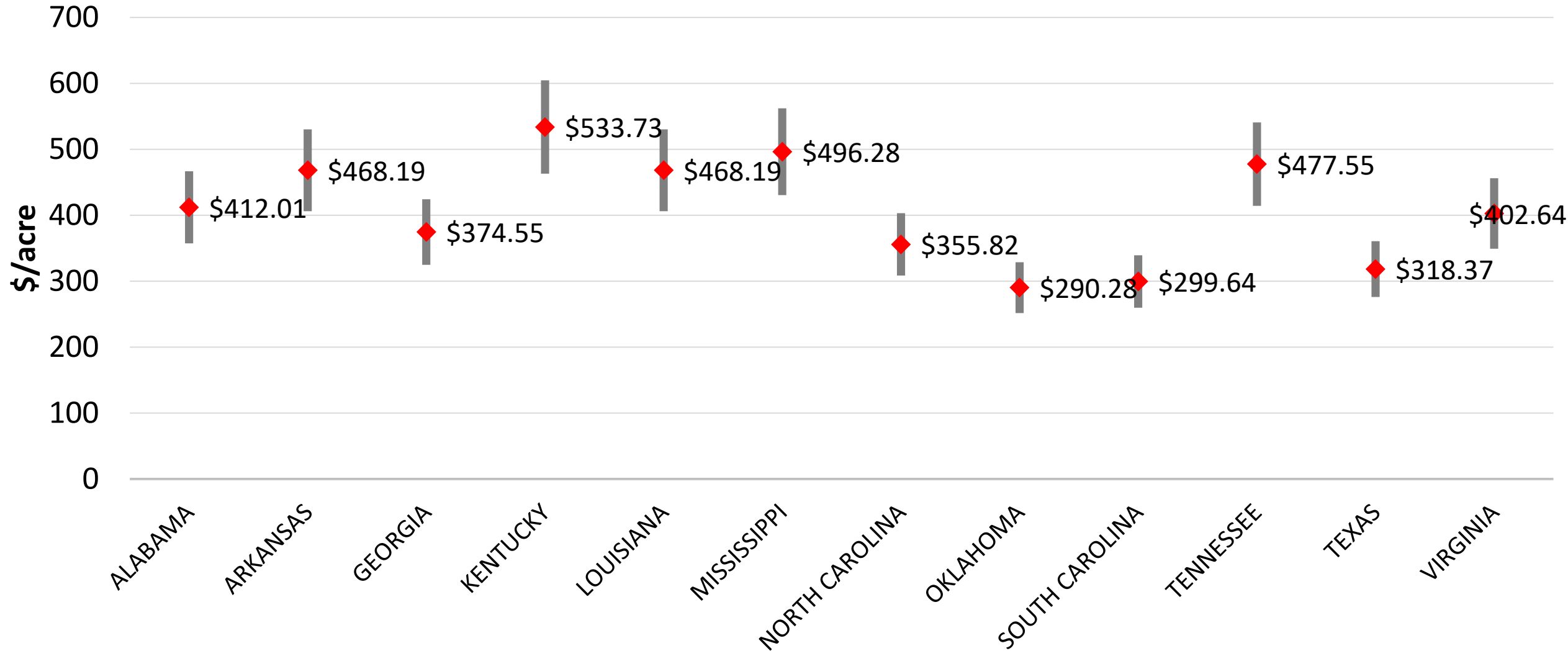
Questions and Discussion.

THANK YOU

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ESTIMATED GROSS RETURNS PER ACRE 2018/19



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