



FO



2015

Fertilizer Outlook &
Technology Conference

Tom Scott

Chief Executive Officer
INFORMA Economics



Agricultural Outlook



The
Fertilizer Institute
Nourish, Replenish, Grow



Fertilizer Industry
Round Table



informa economics

Agricultural Outlook

**Fertilizer Outlook and
Technology Conference
Jacksonville, FL**

Tom Scott
Chief Executive Officer
November 11, 2015

Overview

- **Outlook: Northern Hemisphere Grain Production & Southern Hemisphere Plantings**
- **El Nino Effects**
- **US & Global Acreage Outlook**
- **Soybean Outlook**
- **Feed Grains Outlook**
- **Wheat Outlook**
- **Farm Economics**
- **Questions and Answers**

Key Points

■ General and El Nino

- El Nino is fully in place and will negatively impact some areas (Australia, India) but positively impact others (US wheat belt, Argentine corn).

■ Soybeans

- US soybean ending stocks increased in 2014/15 with record production more than offsetting record exports and crush.
- US stocks seen building further in 2015/16 on large production, lower exports resulting from South American competition.
- US average farm price forecast to decline from \$10.10 in 2014/15 to between \$8.50 and \$8.75 in both 2015/16 & 2016/17.
- South American production to expand further due to currency relationships

Key Points

■ Corn

- US corn ending stocks increased solidly in 2014/15 with record production more than offsetting record usage.
- US ending stocks seen staying large in 2015/16 with larger beginning stocks offsetting smaller crop.
- US exports slow due to record Brazilian supplies and strong dollar, but forecast to improve next spring and summer on smaller competition from S. America & Ukraine.
- US average farm price forecast to increase slightly from \$3.70 in 2014/15 to \$3.80 in 2015/16, but fall to \$3.50 in 2016/17.

Key Points

■ Wheat

- Some wheat quality issues in 15/16, but record global production and stocks to keep prices on defensive. Lower prices expected to modestly boost consumption and global output forecast to decline somewhat in 16/17, which could eventually improve US export prospects.
- US dollar strength likely to remain a drag on competitiveness of US grains and oilseeds.
- Whether current El Nino fades into La Nina by early spring could have a bearing on risk of drier-than-normal growing season for US Midwest.

World 15/16 Soybeans Production

- **Northern Hemisphere Soybeans:** 2015 US soybean production near last year's record with acreage and yields both near records set in 2014. US acreage forecast to increase 0.7 million acres (1%) in 2016.
- **Southern Hemisphere Soybeans:** Brazil and Argentina harvested record-large crops earlier this year on increased area and high yields. Brazil plantings forecast to increase 5% this year with strong dollar & weak Brazilian real boosting local prices. Argentina soybean area seen up 6% due to drop in corn area.

World 15/16 Corn Production

- **Northern Hemisphere Corn:** 2015 US corn production below last year's record due to lower acreage and yield. US acreage forecast to increase 2.5 million acres (3%) in 2016.
- **Southern Hemisphere Corn:** 2015 Brazil harvest record large due to record yield. Argentina harvest near previous 2 years with record yield offsetting lower area. Brazil plantings seen down 1% this year. Argentina forecast to drop more than 20% due to lack of trust in government, but decline could be more moderate if opposition party presidential candidate wins Nov. 22 runoff.

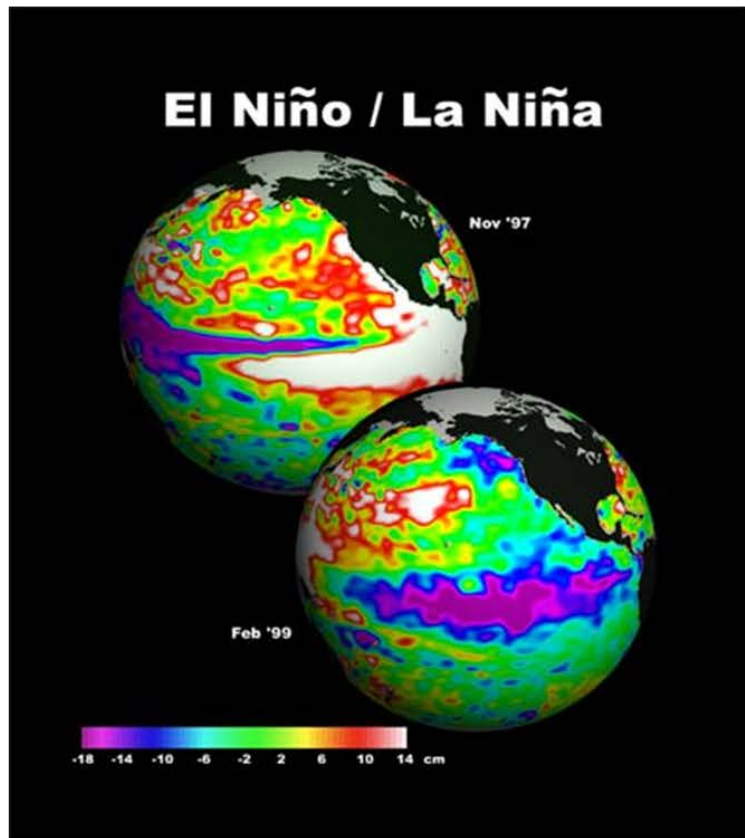
World 15/16 Wheat Production

- **Northern Hemisphere Wheat:** N. American output slightly below early-season expectations, Europe and FSU well above for 2015. Sowing of 2016 winter crop nearly complete. Most of US crop in near average condition, except for PNW. Dry conditions in FSU similar to last year, with crop expected to be in poorer than normal condition heading into winter.
- **Southern Hemisphere Wheat:** Argentine wheat output in good condition, but output expected to be down 24% from last year, mainly due to area decline. Australian potential trimmed by dry October related to El Nino conditions.

El Nino Effects

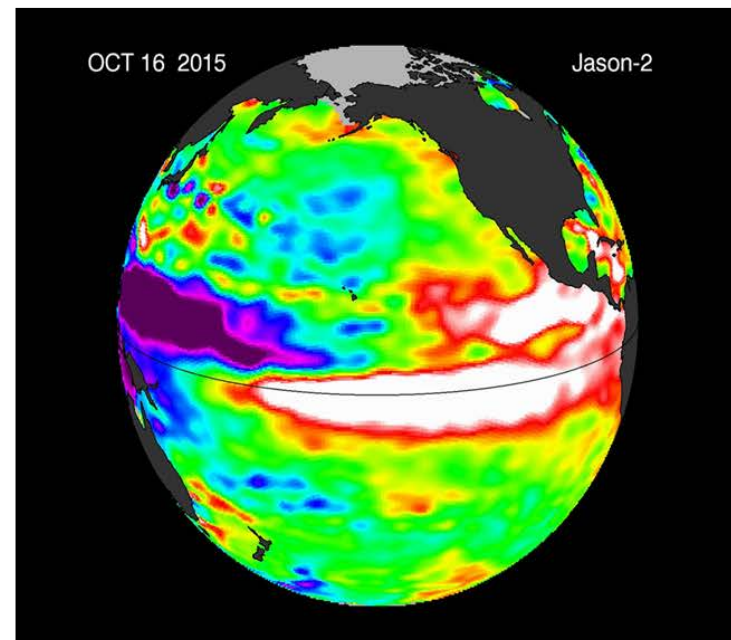
El Nino Effects

- **Northern Hemisphere effects have been seen:**
 - US Corn and Soybeans, more moisture in the Western Corn Belt this season was typical of El Nino
 - India below average monsoon was also attributed to El Nino
 - Fewer Caribbean/Atlantic Hurricanes.....so far



Latest Image El Nino Watch →

← Historical El Nino/La Nina Example

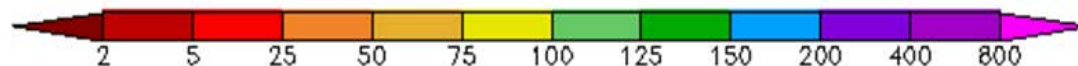
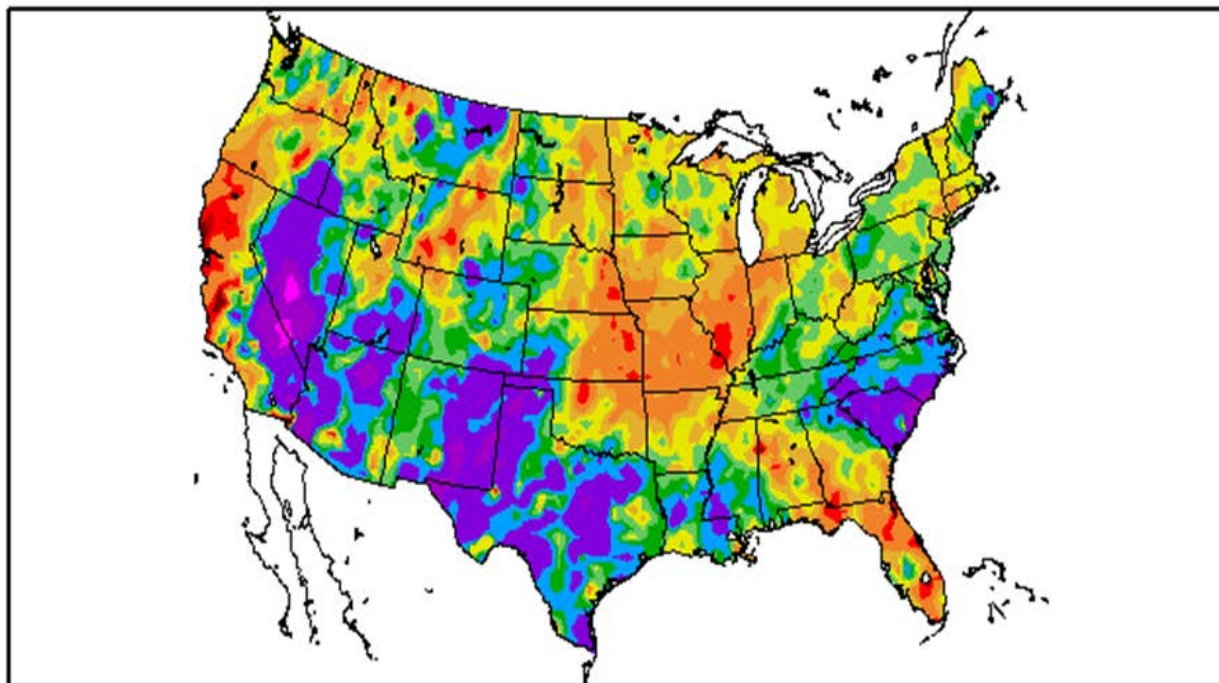


Source: <http://sealevel.jpl.nasa.gov/files/archive/science-elnino/el-nino-la-nina.jpg>

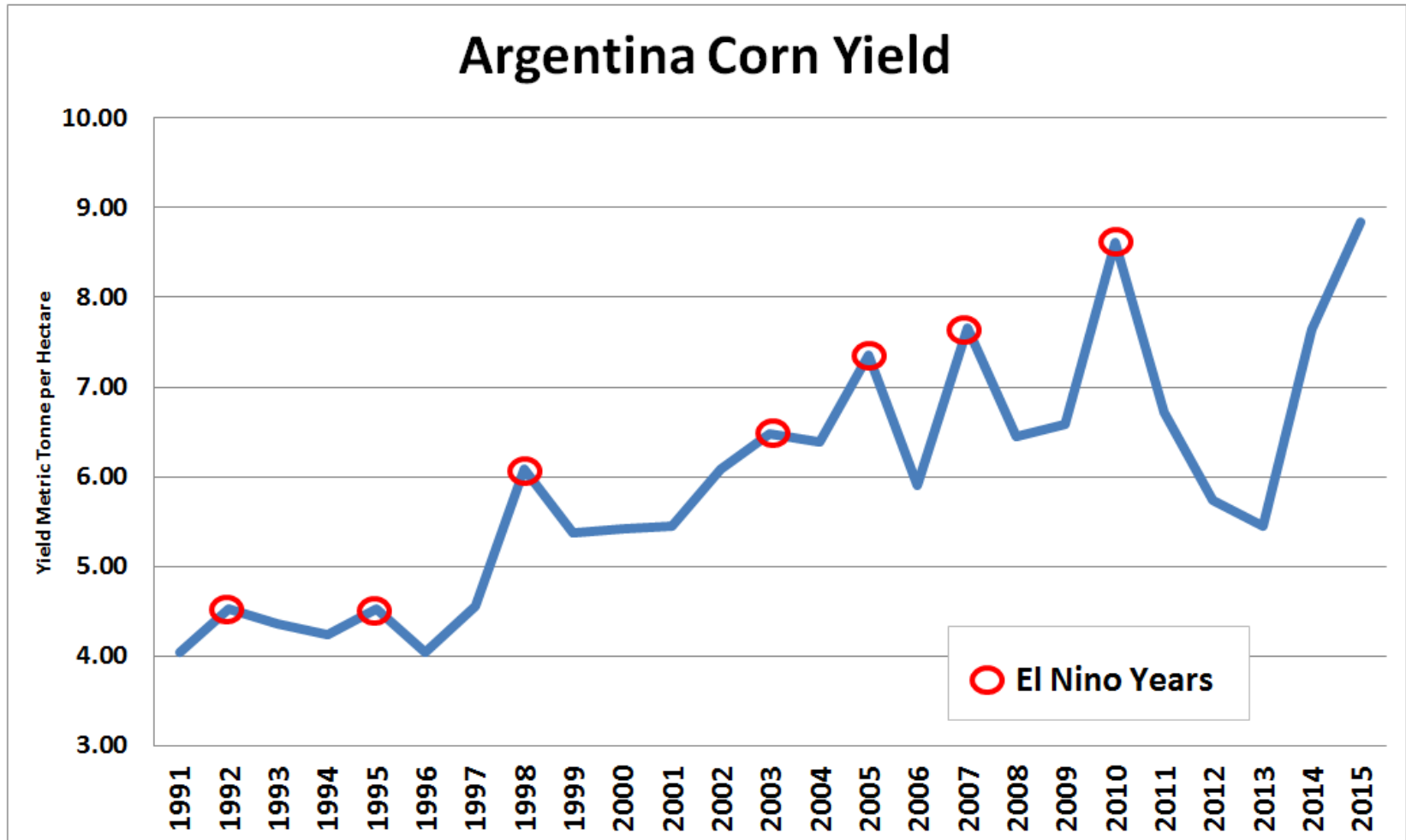
El Nino Effects Next Few Months

- Above Normal Rains south Brazil and Argentina favors corn yield
- Dry east Australia stresses wheat
- US Hard Red Wheat yields tend to be above trend year following El Nino
- 2016 India wheat could be negatively affected by possible drier-than-normal winter due to El Nino which would add the potential uncertainty due to possible lower irrigation sources

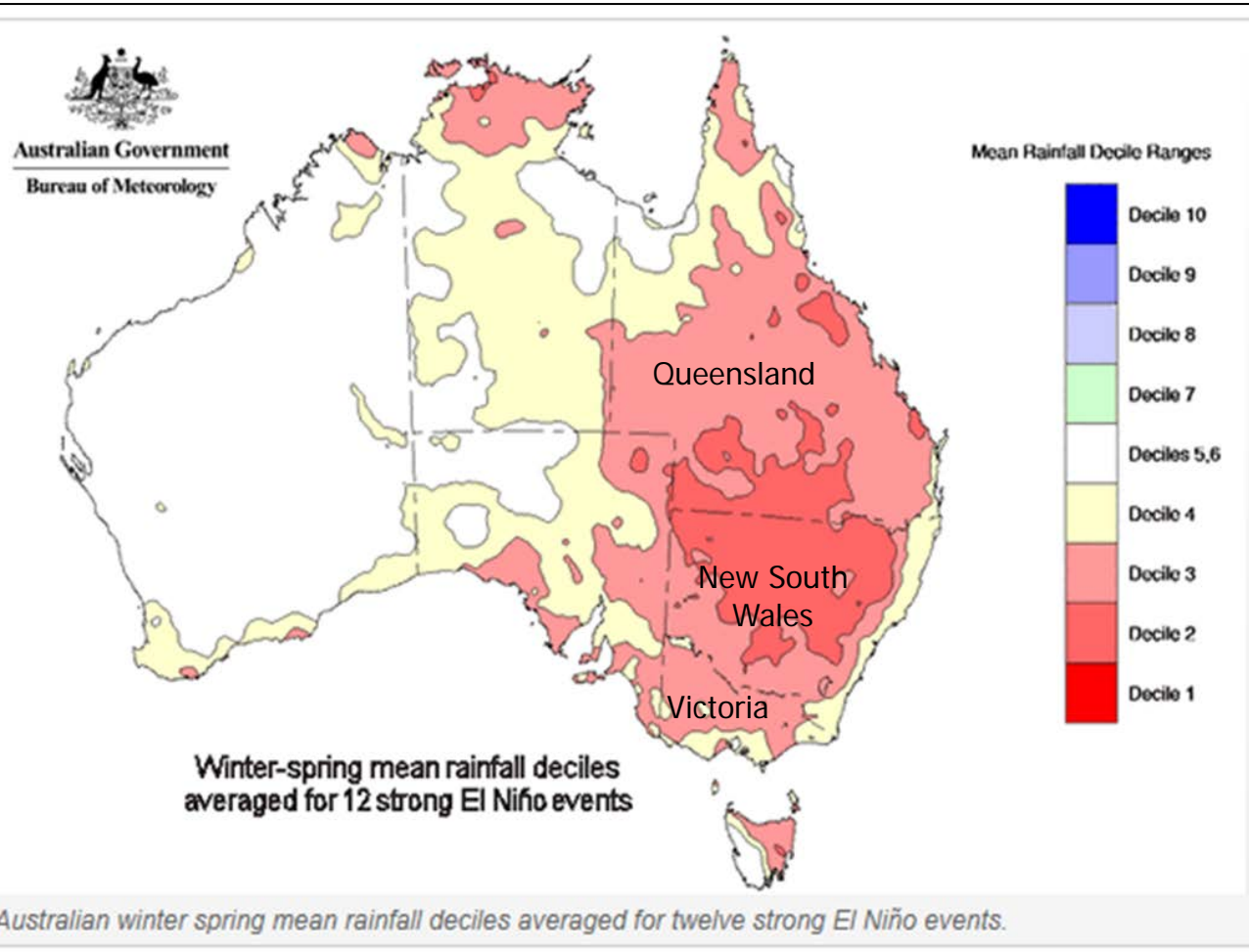
Percent of Normal Precipitation (%)
10/1/2015 – 10/31/2015



El Nino Effects on Argentina, Usually Positive



El Nino Effects on Australia

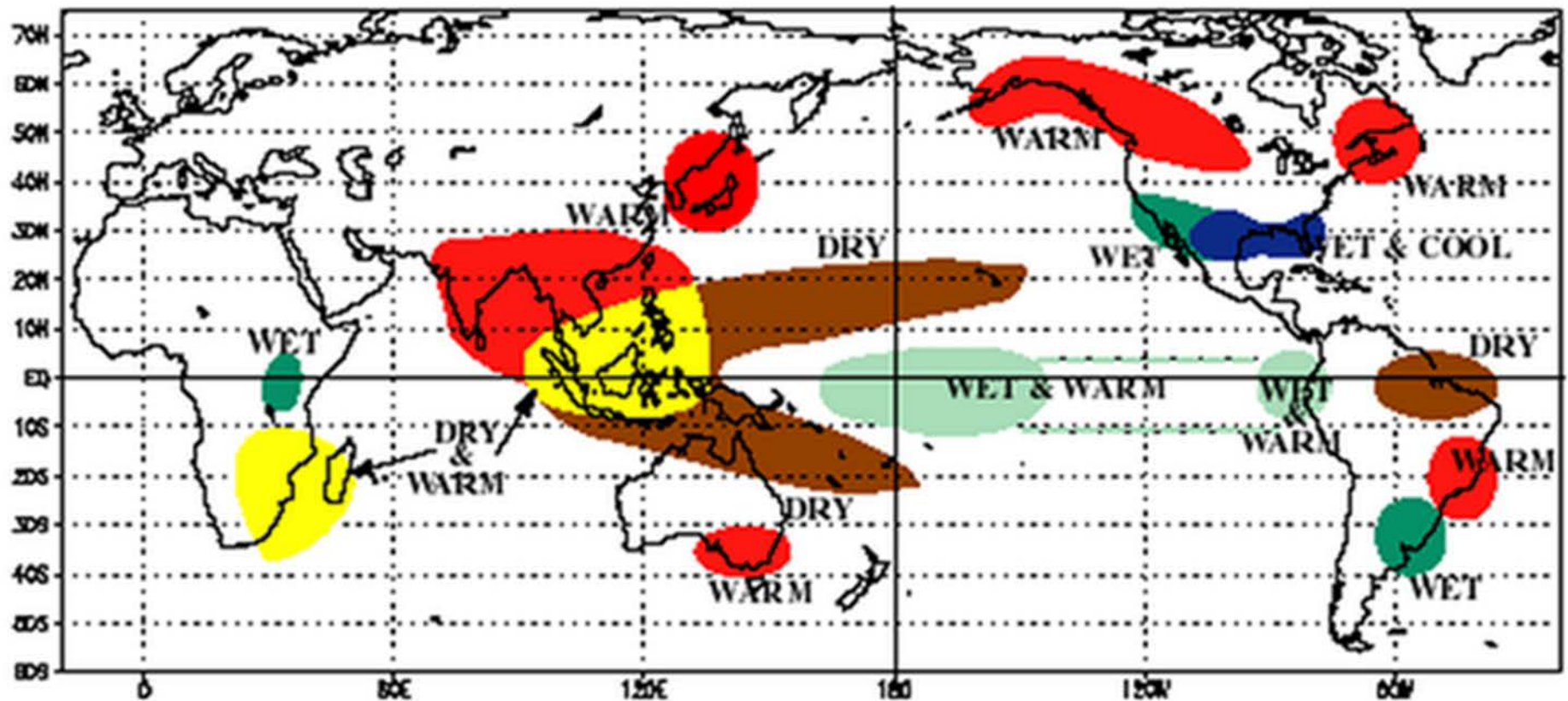


- Drought usually affects eastern Australia.
- Queensland, New South Wales and Victoria account for 45-50% wheat production
- Percent of Australia Wheat Production:
 - New South Wales 30%
 - Victoria 15%
 - Queensland 5%

El Nino Effects on the World

Southeast Asia Drought Could Continue

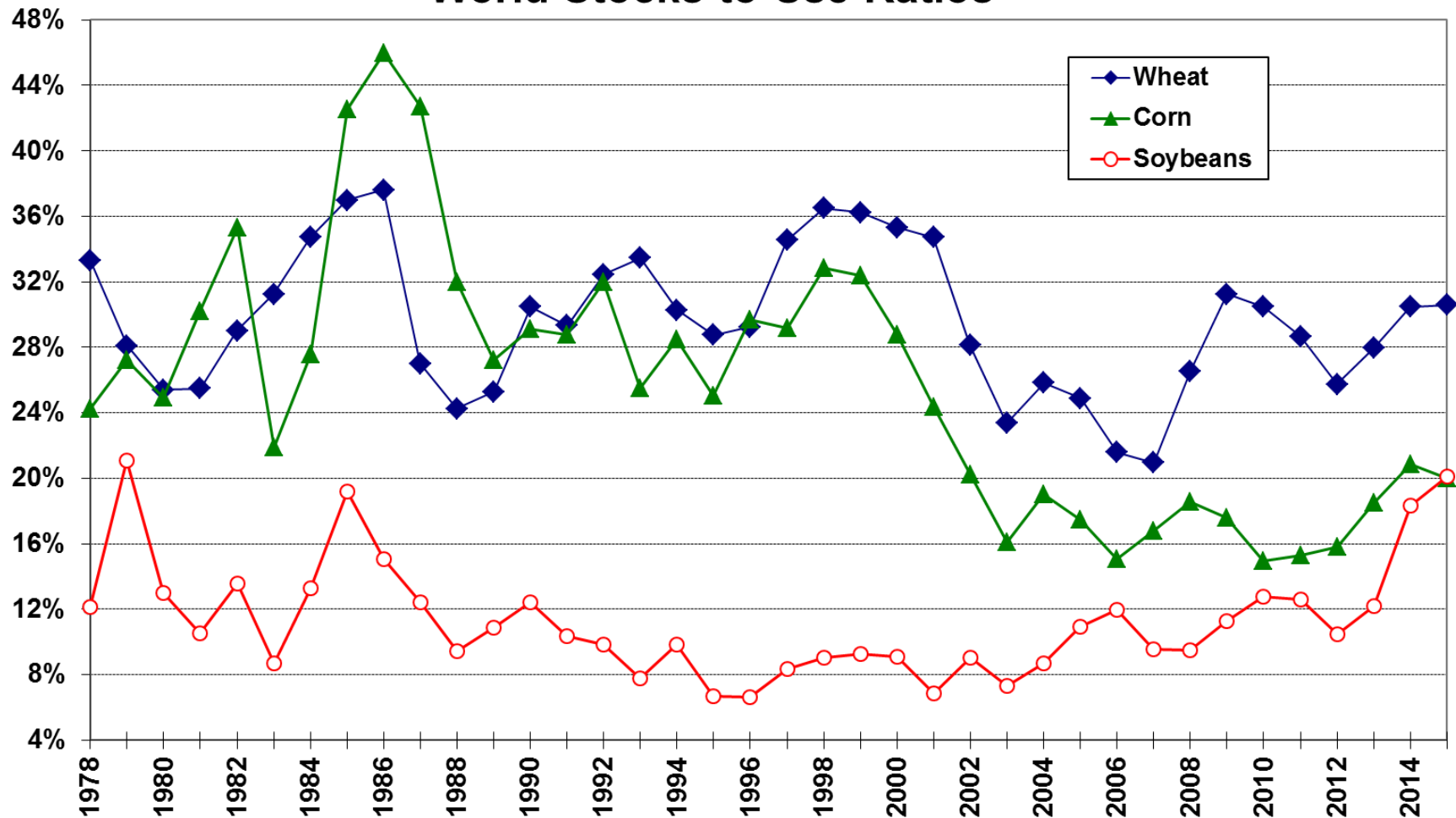
WARM EPISODE RELATIONSHIPS DECEMBER - FEBRUARY



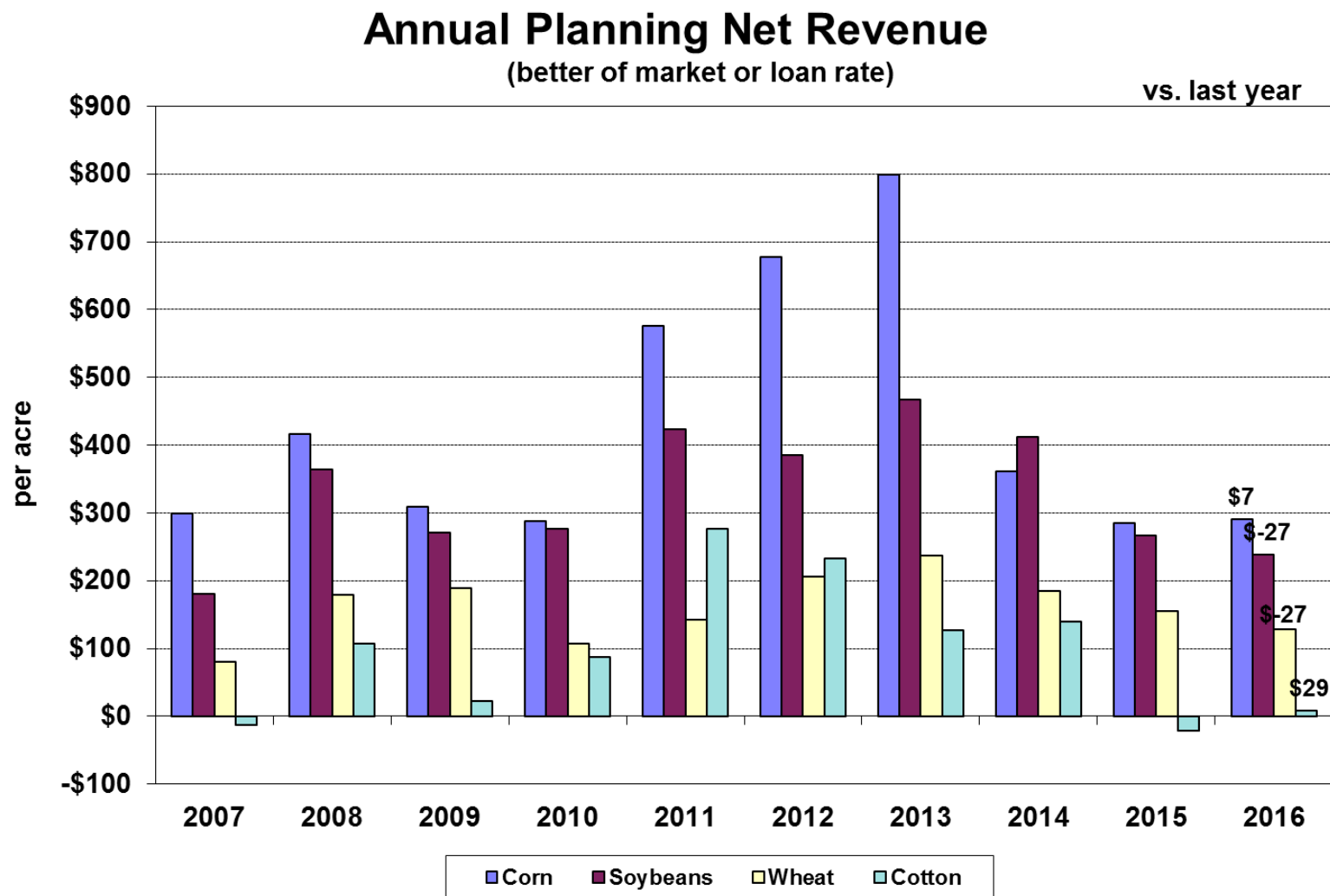
US and Global Acreage Outlook

Transitioning to a Better-Supplied World

World Stocks-to-Use Ratios



Economics Favor Corn, Cotton in 2016



US Planted Acreage

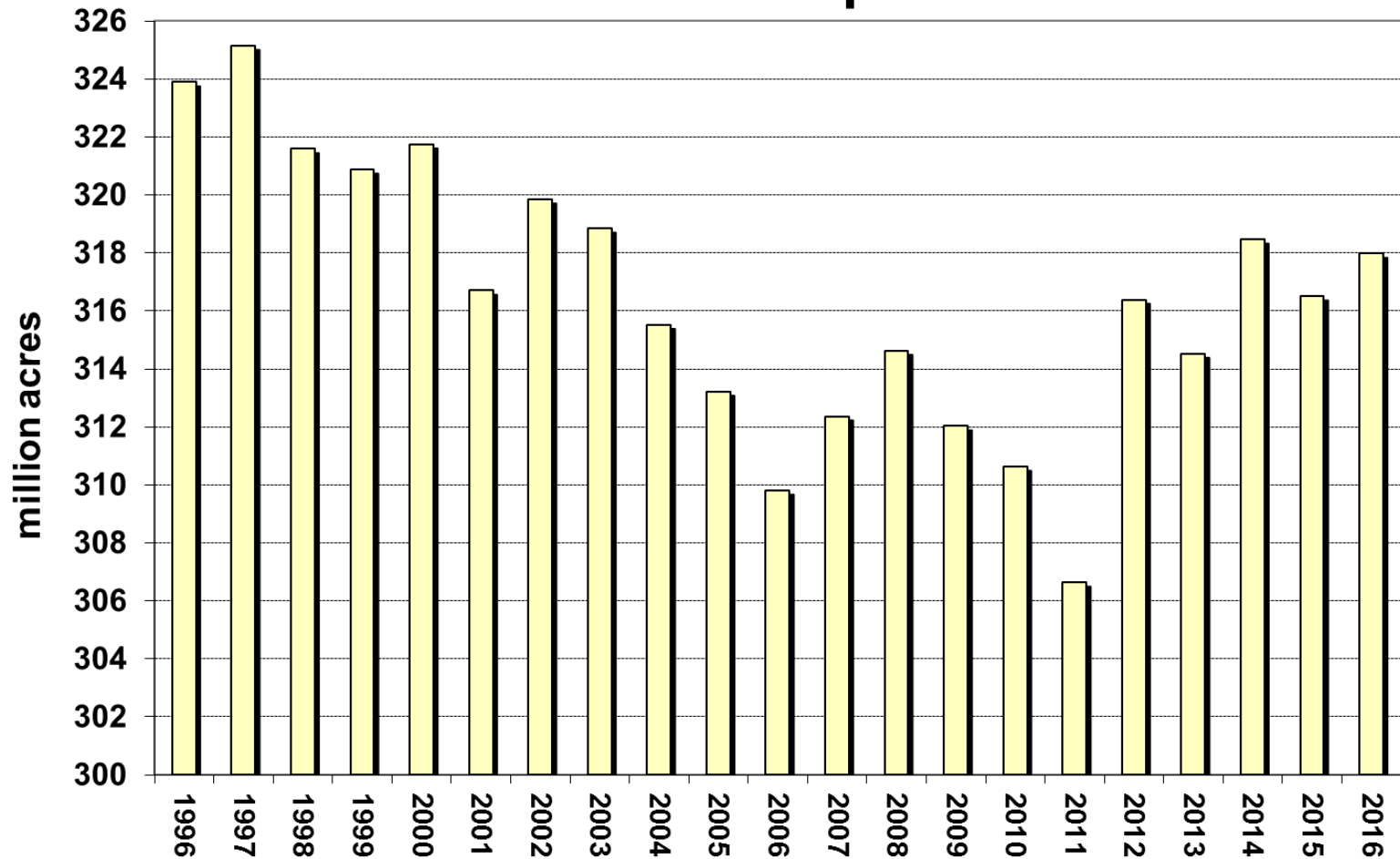
(Million Acres)

	2013	2014	2015	2016	16/15
Corn	95.4	90.6	88.4	90.8	103%
Sorghum	8.1	7.1	8.7	8.1	93%
Oats	3.0	2.8	3.1	3.0	96%
Barley	3.5	3.0	3.6	3.4	96%
Feed Grains	109.9	103.5	103.7	105.3	102%
Winter Wheat	43.2	42.4	39.5	39.3	100%
Spring Wheat	11.6	13.0	13.2	12.9	97%
Durum	1.4	1.4	1.9	1.8	94%
All Wheat	56.2	56.8	54.6	54.0	99%
Rice	2.5	2.9	2.6	2.8	107%
Soybeans	76.8	83.3	83.2	83.9	101%
All Cotton	10.4	11.0	8.6	9.6	113%
Sunflowers	1.6	1.6	1.9	1.7	93%
CRP	26.8	25.4	24.1	24.0	100%
Prevented Planting	9.4	4.8	6.7	3.6	54%

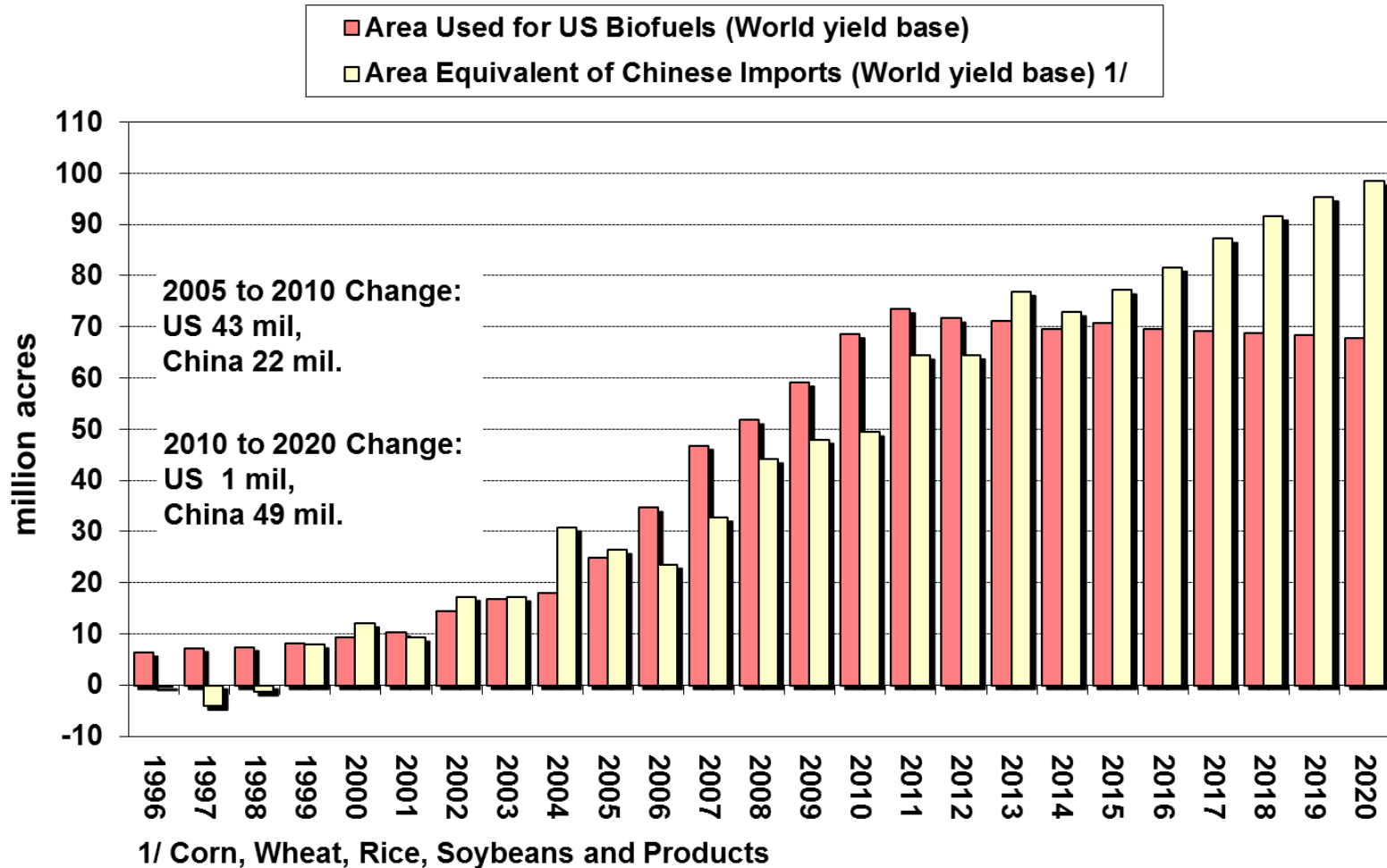
US Long-Term Acreage Outlook

US Planted Area (Million Acres)											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn	88.2	91.9	97.3	95.4	90.6	88.4	90.8	90.0	89.0	88.5	88.0
Sorghum	5.4	5.5	6.3	8.1	7.1	8.7	8.1	7.8	7.5	7.6	7.5
Barley	2.9	2.6	3.7	3.5	3.0	3.6	3.4	3.3	3.3	3.2	3.2
Oats	3.1	2.3	2.7	3.0	2.8	3.1	3.0	3.0	2.9	2.9	2.8
Wheat	52.6	54.3	55.3	56.2	56.8	54.6	54.0	53.0	52.0	53.0	54.0
Rice	3.6	2.7	2.7	2.5	2.9	2.6	2.8	2.9	2.8	2.8	2.8
Soybeans	77.4	75.0	77.2	76.8	83.3	83.2	83.9	86.0	88.5	88.0	87.5
Peanuts	1.3	1.1	1.6	1.1	1.4	1.6	1.5	1.5	1.5	1.5	1.5
Sunflowers	2.0	1.5	1.9	1.6	1.6	1.9	1.7	1.7	1.7	1.7	1.7
Canola	1.4	1.1	1.8	1.3	1.7	1.8	1.9	1.9	1.9	2.0	2.0
All Cotton	11.0	14.7	12.3	10.4	11.0	8.6	9.6	9.2	9.1	9.0	9.0
Double-Counted	2.9	5.6	5.9	7.8	5.9	5.1	5.0	5.0	5.0	5.0	5.0
Crop Total	310.6	306.6	316.4	314.5	318.5	316.5	318.0	317.6	318.1	317.9	317.8
CRP	31.3	31.1	29.5	26.8	25.4	24.1	24.0	24.0	24.0	24.0	24.0
Prevented Planting	6.9	11.0	1.3	9.4	4.8	6.7	3.6	4.7	4.7	4.7	4.7
Grand Total (ex. Hay)	289.2	293.6	292.5	292.8	291.6	288.9	288.4	288.8	288.8	288.6	288.5

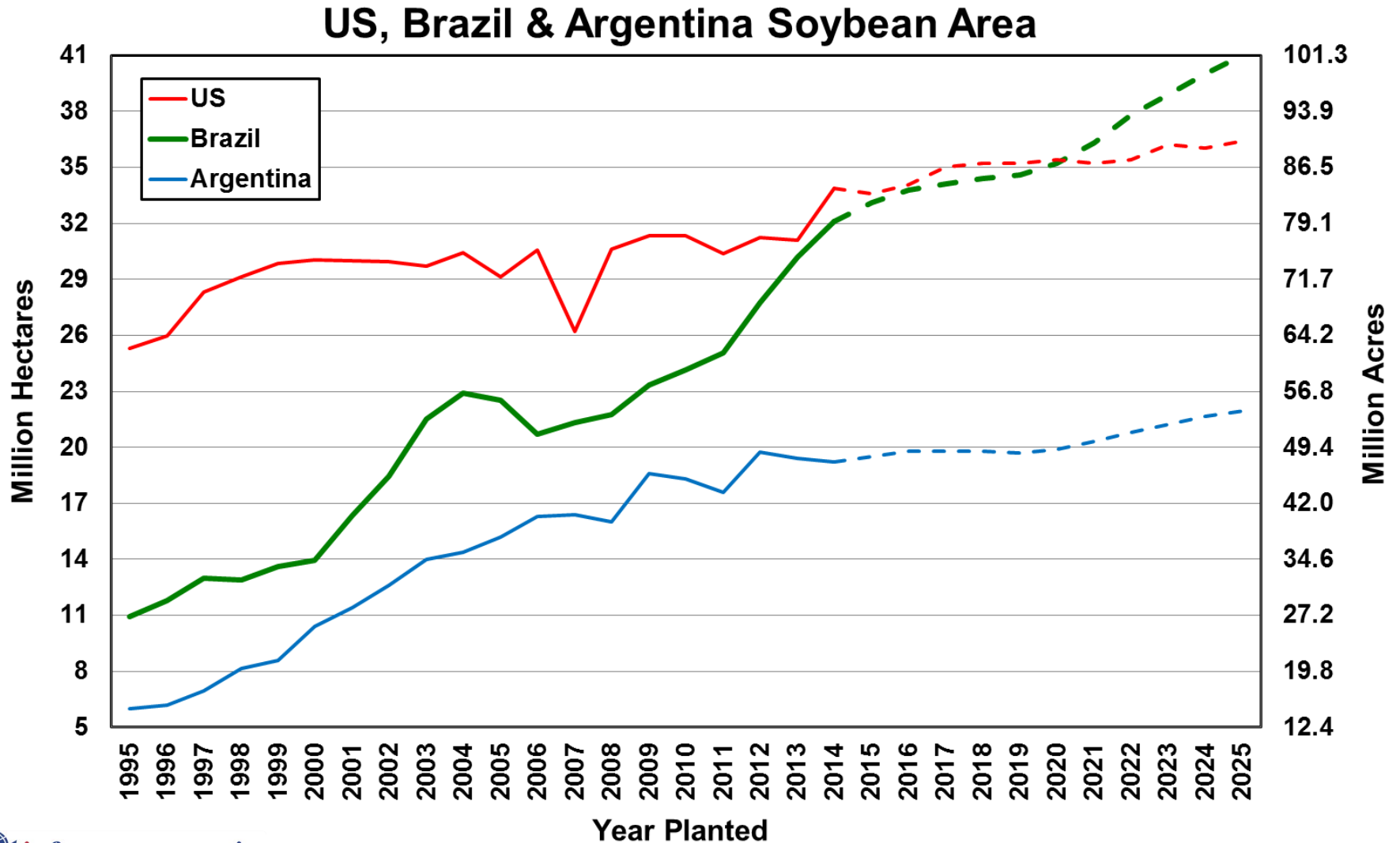
US Total Crop Area



US Biofuels and Chinese Import Acreage

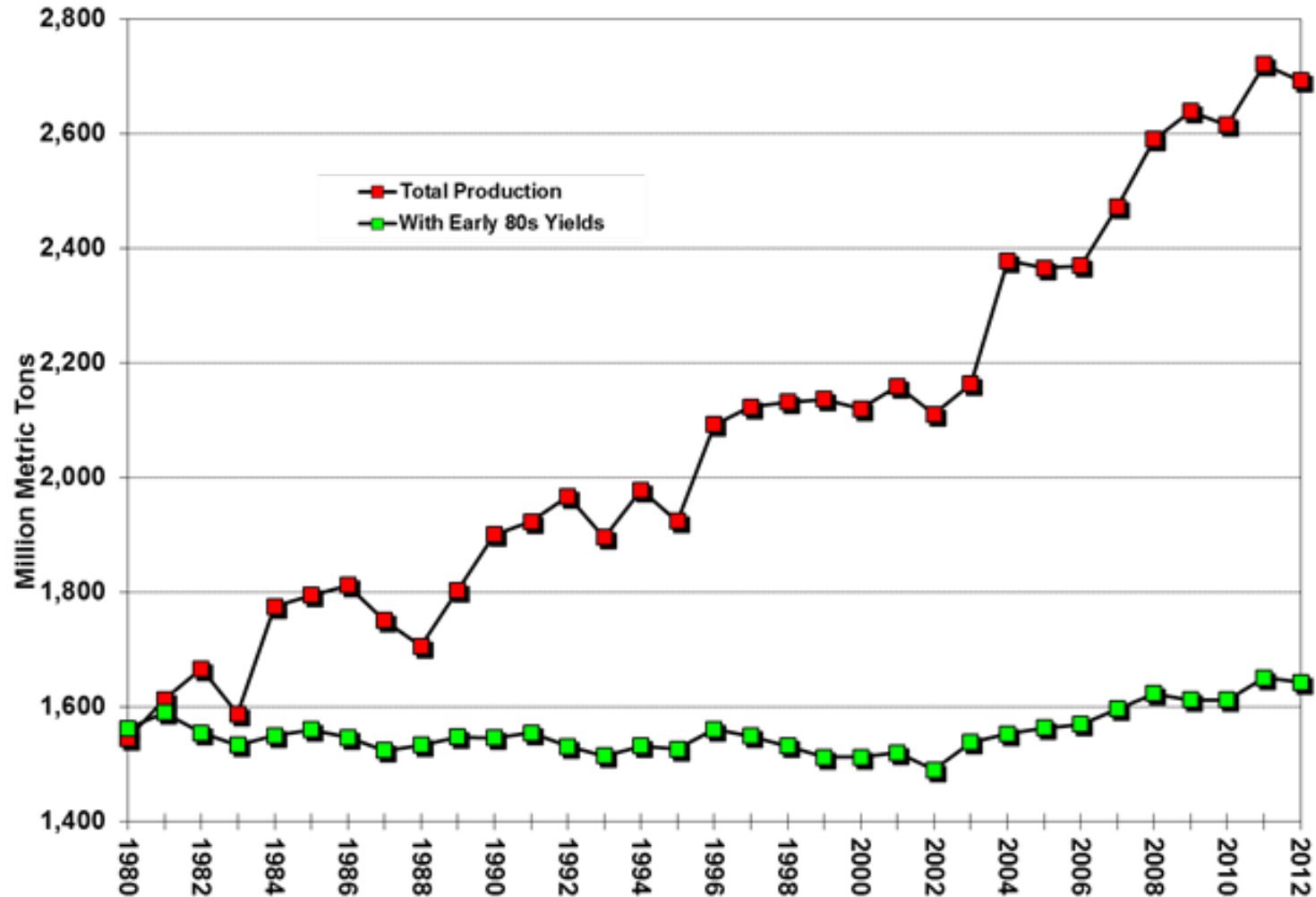


Brazil Soybean Area Approaching US Level



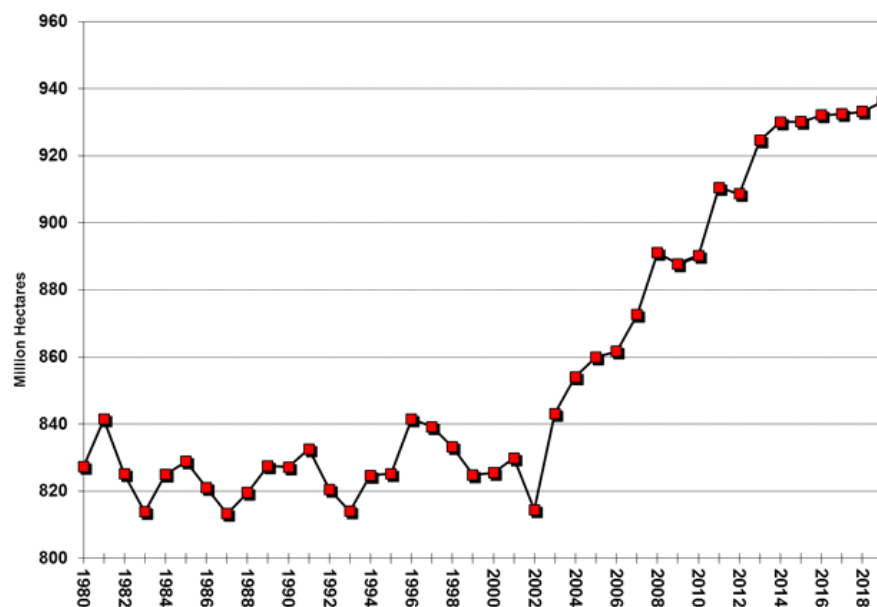
Global Grain and Oilseed Production

Actual and Early 1980's Yields

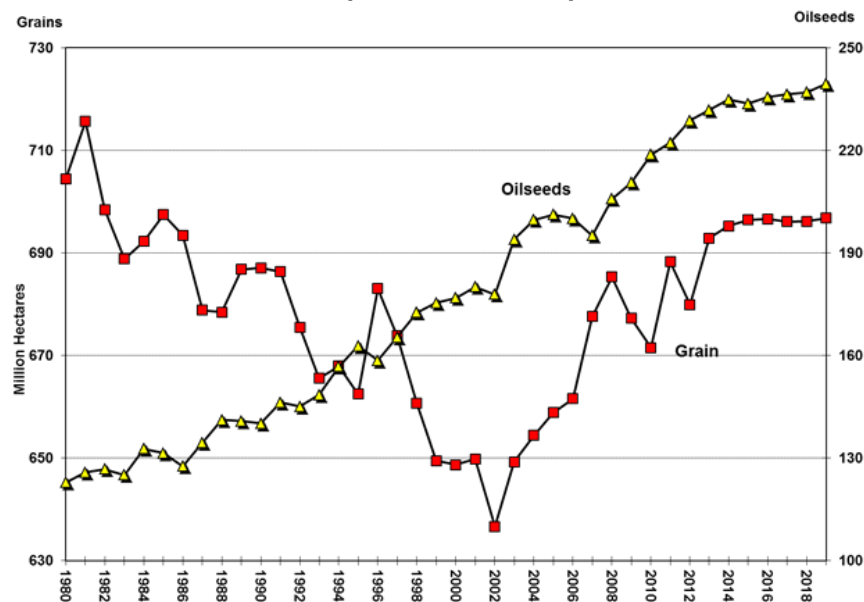


Future Acreage Expansion Focused on Oilseeds

World Total Area of Grains and Oilseeds



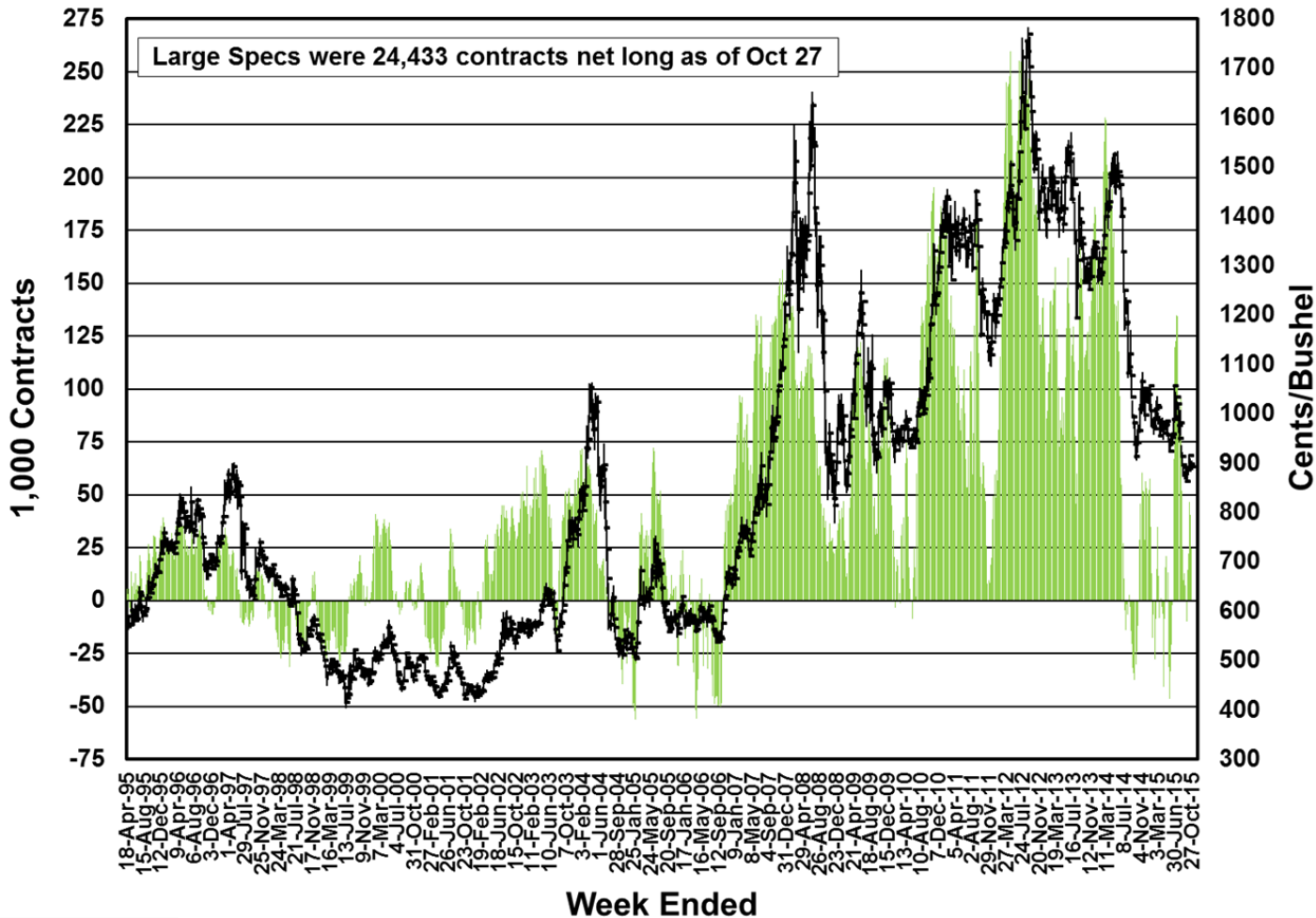
World Crop Area Composition



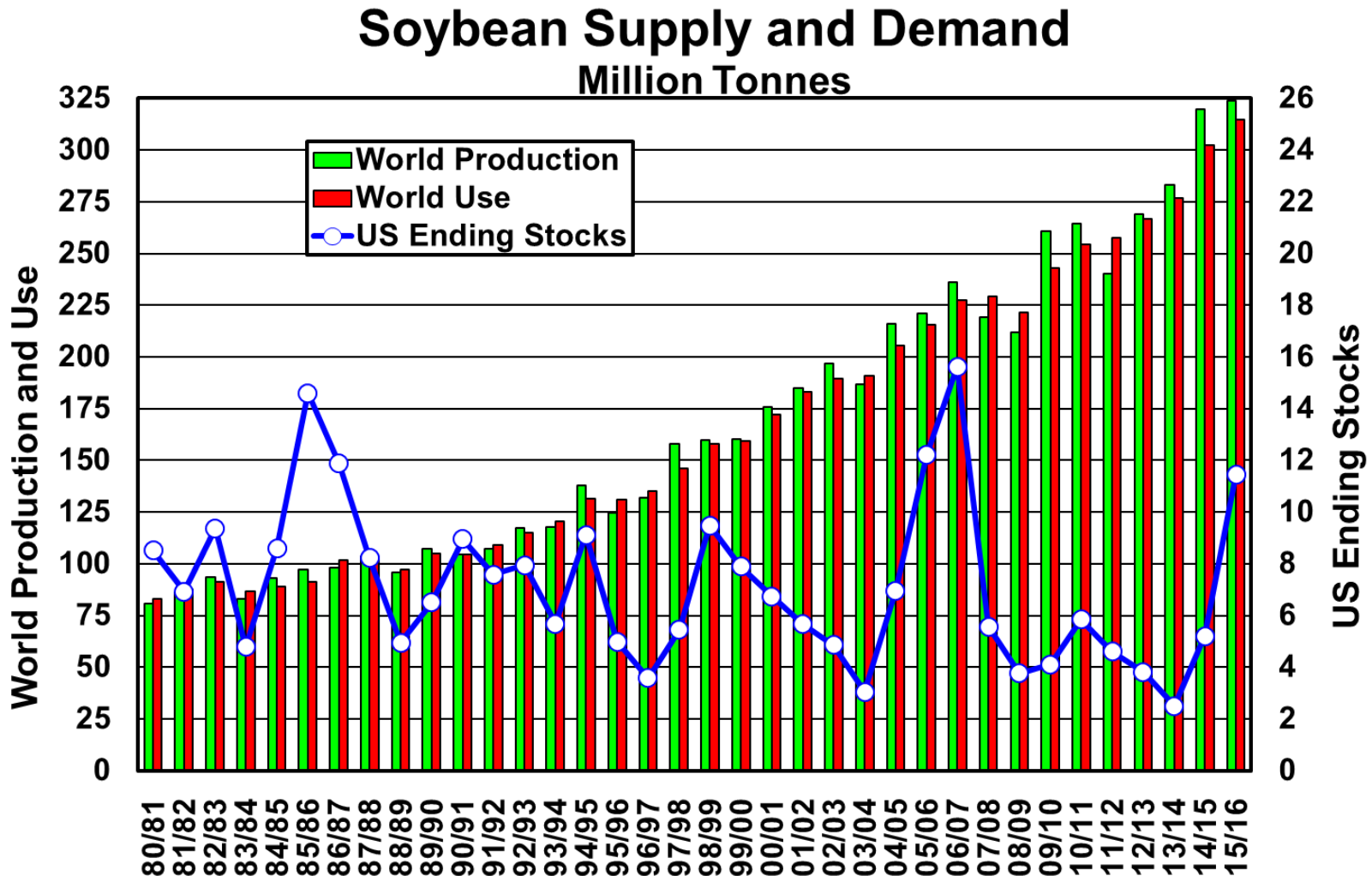
Soybean Outlook

Where Have Soybean Futures Prices Been?

Nearby Soybean Futures vs. Large Spec Net Futures & Options Position



Huge Global Production, Growing Supplies

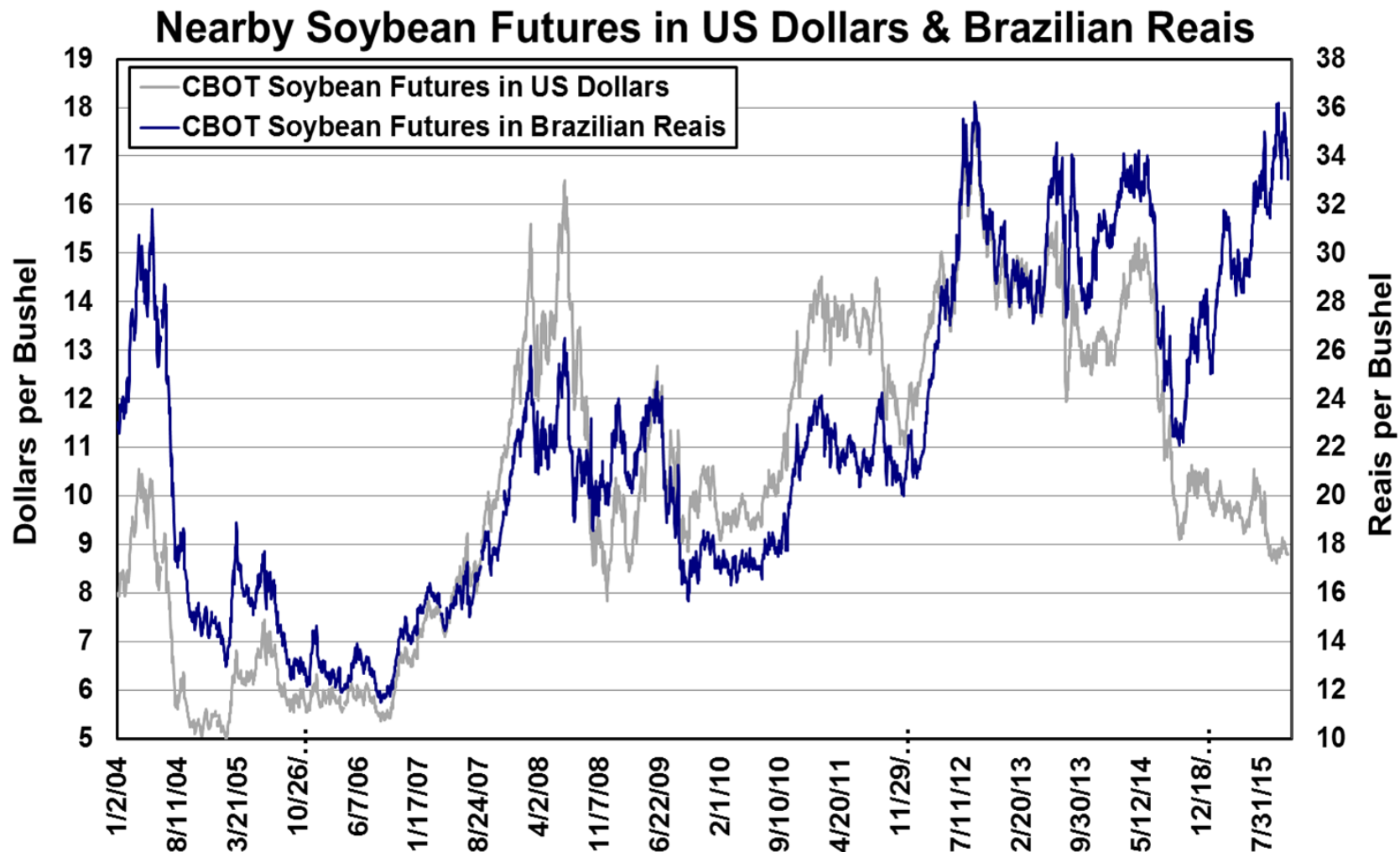


Strong USD Pushes US/Brazil Exchange Rate Above 4

Brazilian Reais per US Dollar

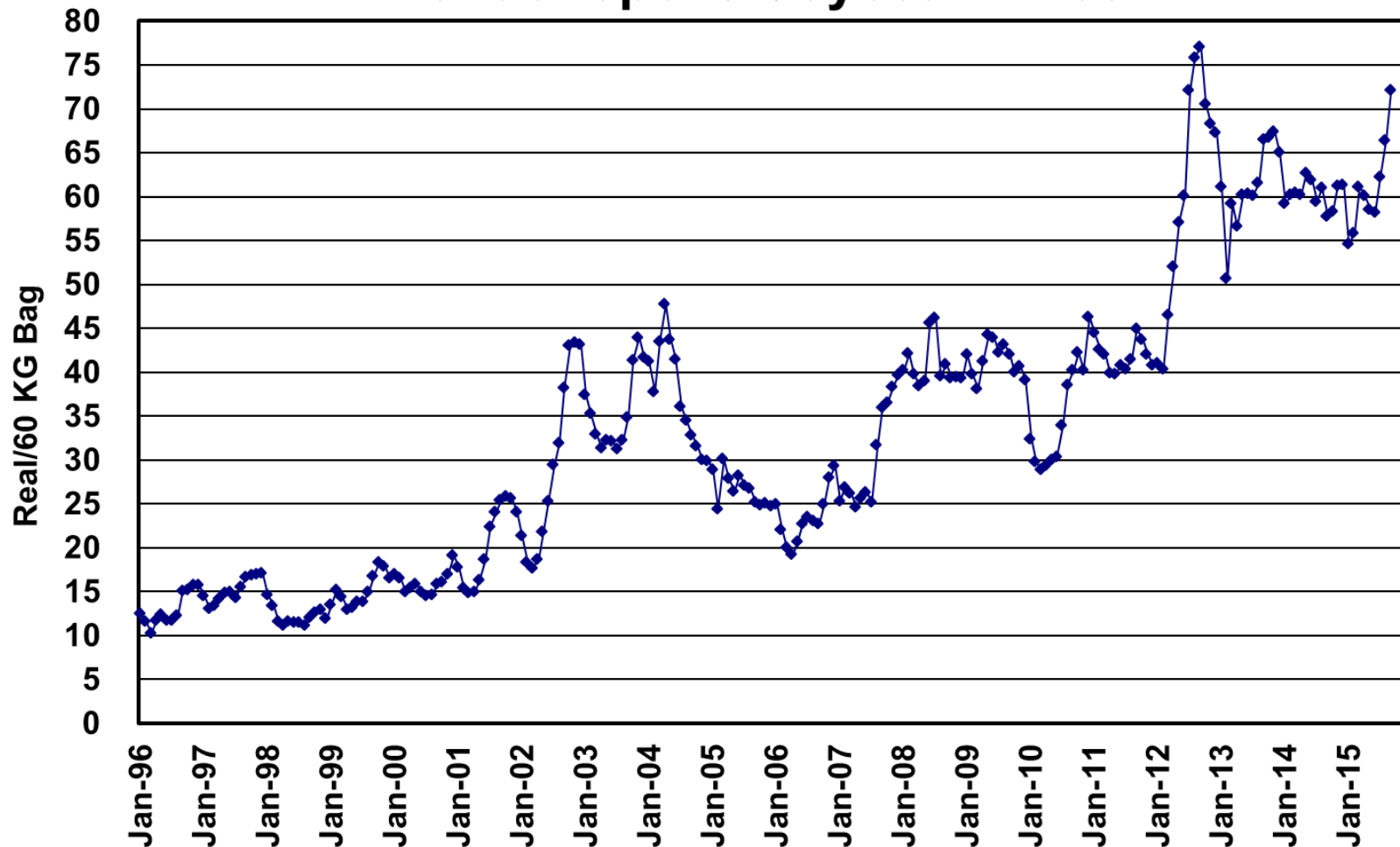


Impact of USD Significant, and Not Only in Brazil

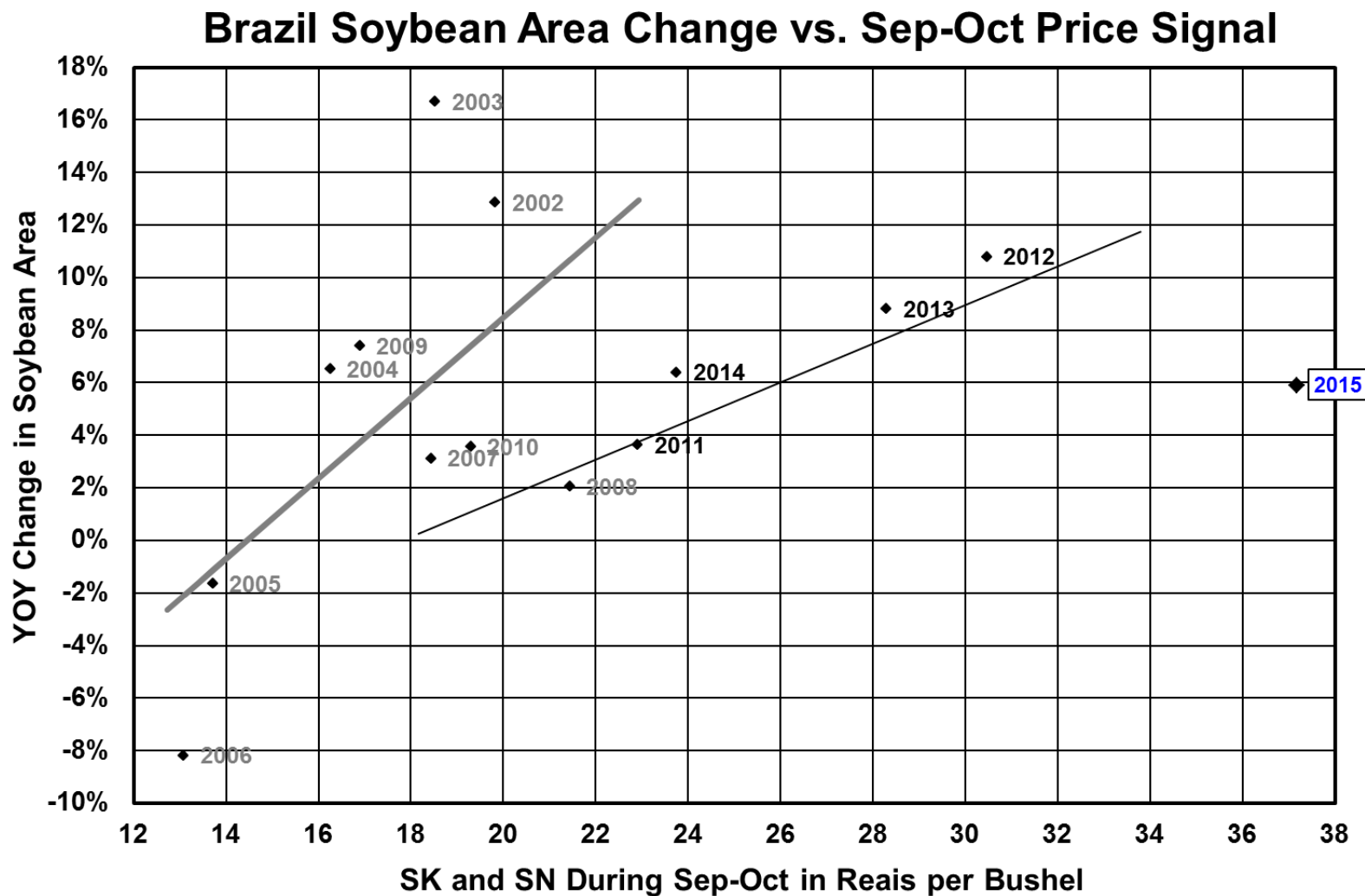


The Brazilian Farmer is Seeing Higher Prices!

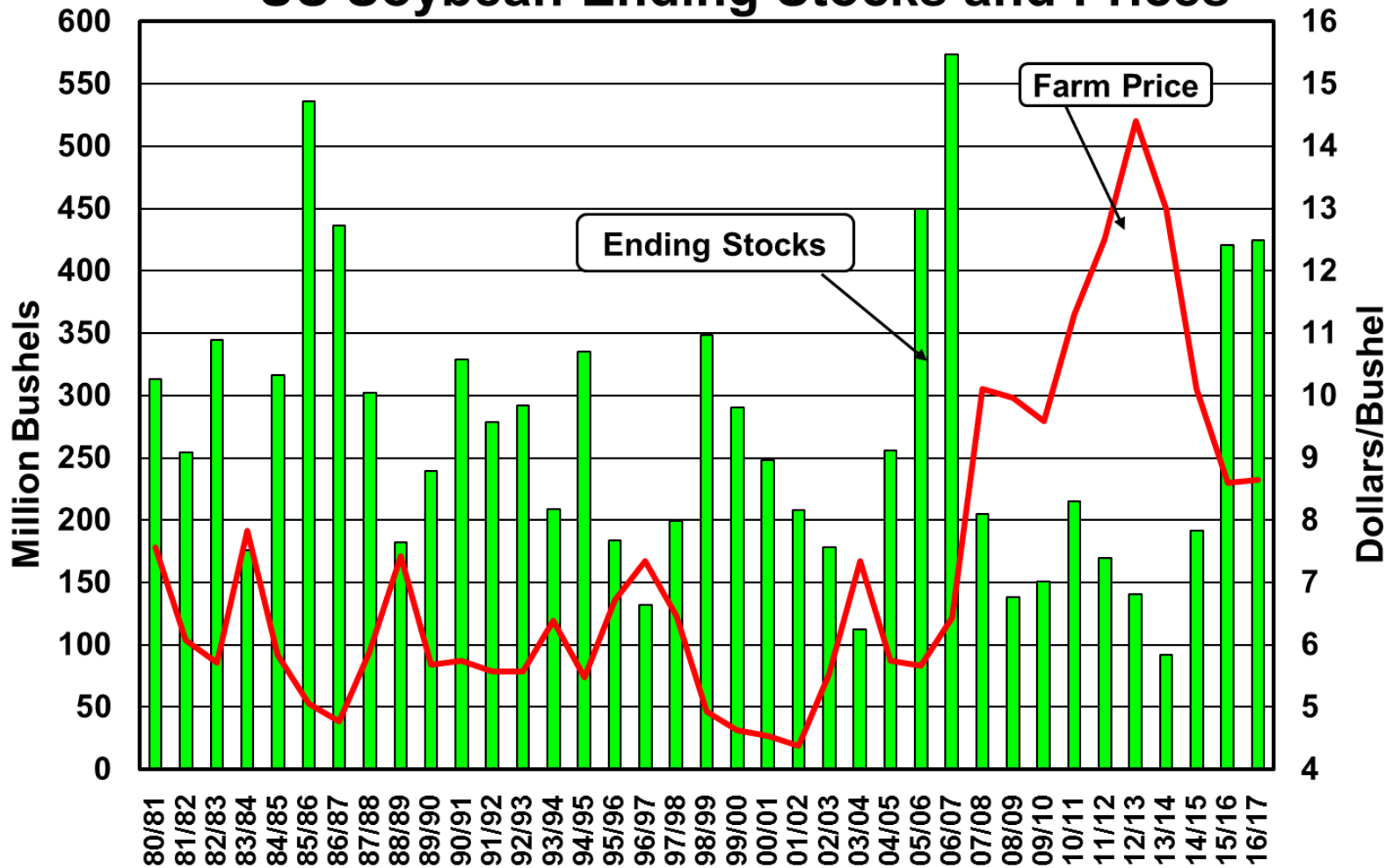
Rondonópolis Soybean Price



Brazil Acreage Response to Local Prices



US Soybean Ending Stocks and Prices

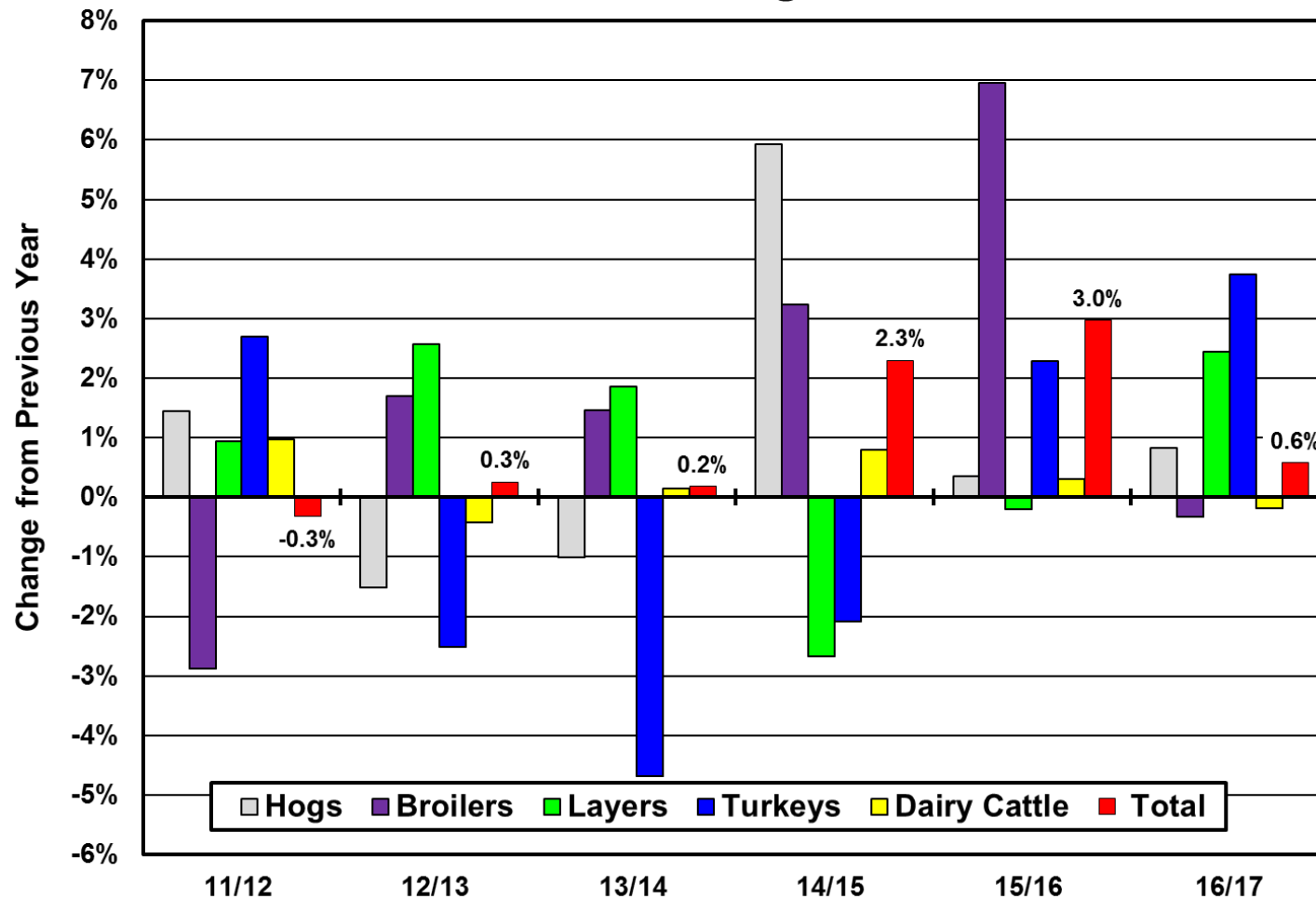


US Soybean Supply and Demand

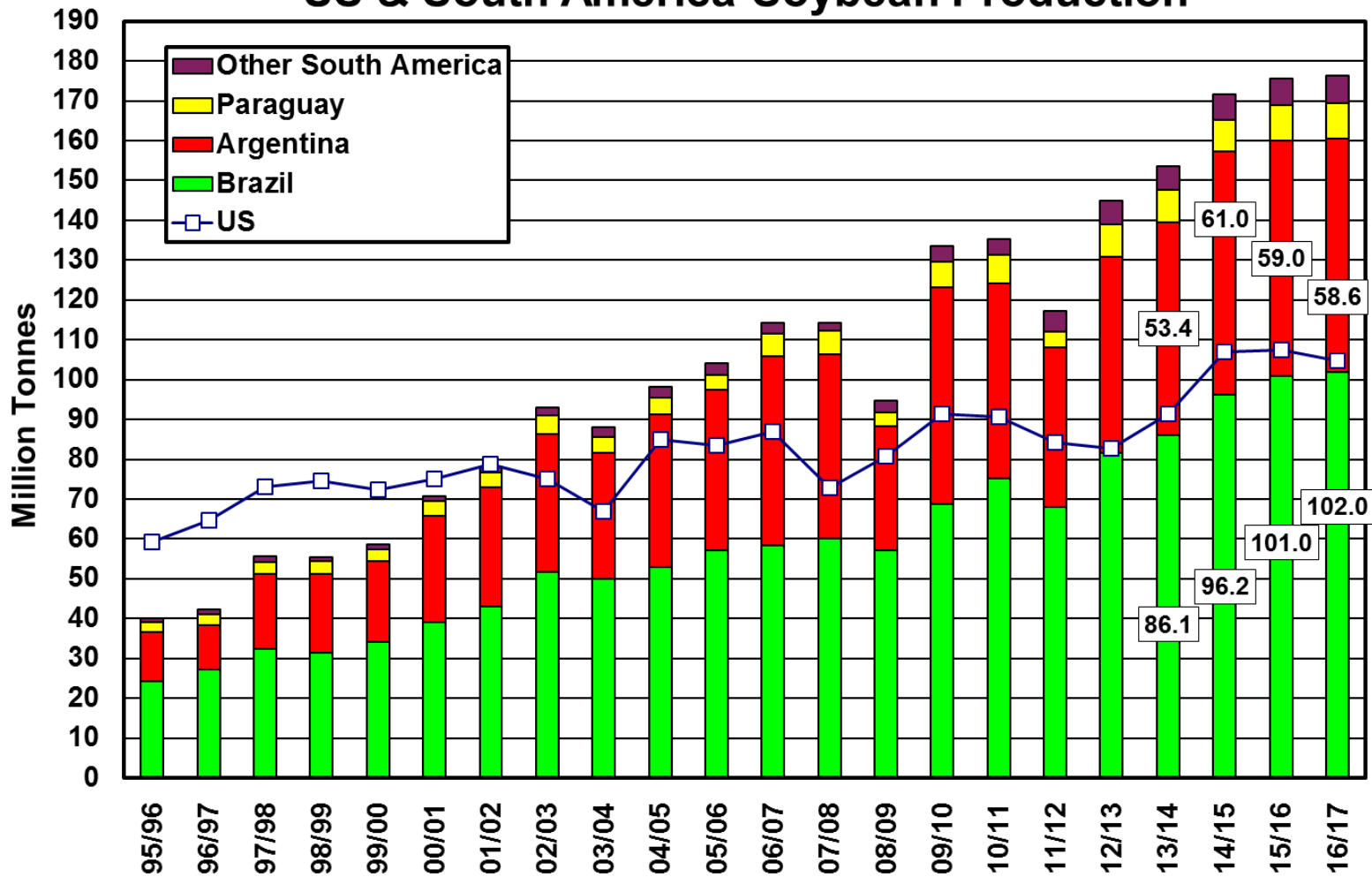
Million Bushels/Million Acres

	2013/14	2014/15		2015/16		2016/17
		USDA	Informa	USDA	Informa	
Planted Acres	76.8	83.3	83.3	83.2	83.2	83.9
Harvested Acres	76.3	82.6	82.6	82.4	82.4	83.2
Yield	44.0	47.5	47.5	47.2	47.9	46.2
Carryin	141	92	92	191	191	421
Production	3,358	3,927	3,927	3,888	3,952	3,848
Imports	72	33	33	30	35	35
Total Supply	3,570	4,052	4,052	4,109	4,178	4,304
Crush	1,734	1,875	1,873	1,880	1,910	1,930
Exports	1,638	1,843	1,843	1,675	1,725	1,825
Seed	97	97	97	92	97	100
Residual	9	46	48	38	25	25
Total Use	3,478	3,861	3,861	3,685	3,757	3,880
Carryout	92	191	191	425	421	424
Stocks/Use	2.6%	5.0%	5.0%	11.5%	11.2%	10.9%
Futures (\$/Bu.)	13.37	9.84	9.84		8.65	8.85
Farm Price (\$/Bu.)	13.00	10.10	10.10	8.40-9.90	8.60	8.65

Protein-Consuming Animal Units



US & South America Soybean Production



Brazil Soybean Complex

(1,000 Tonnes/1,000 Hectares)

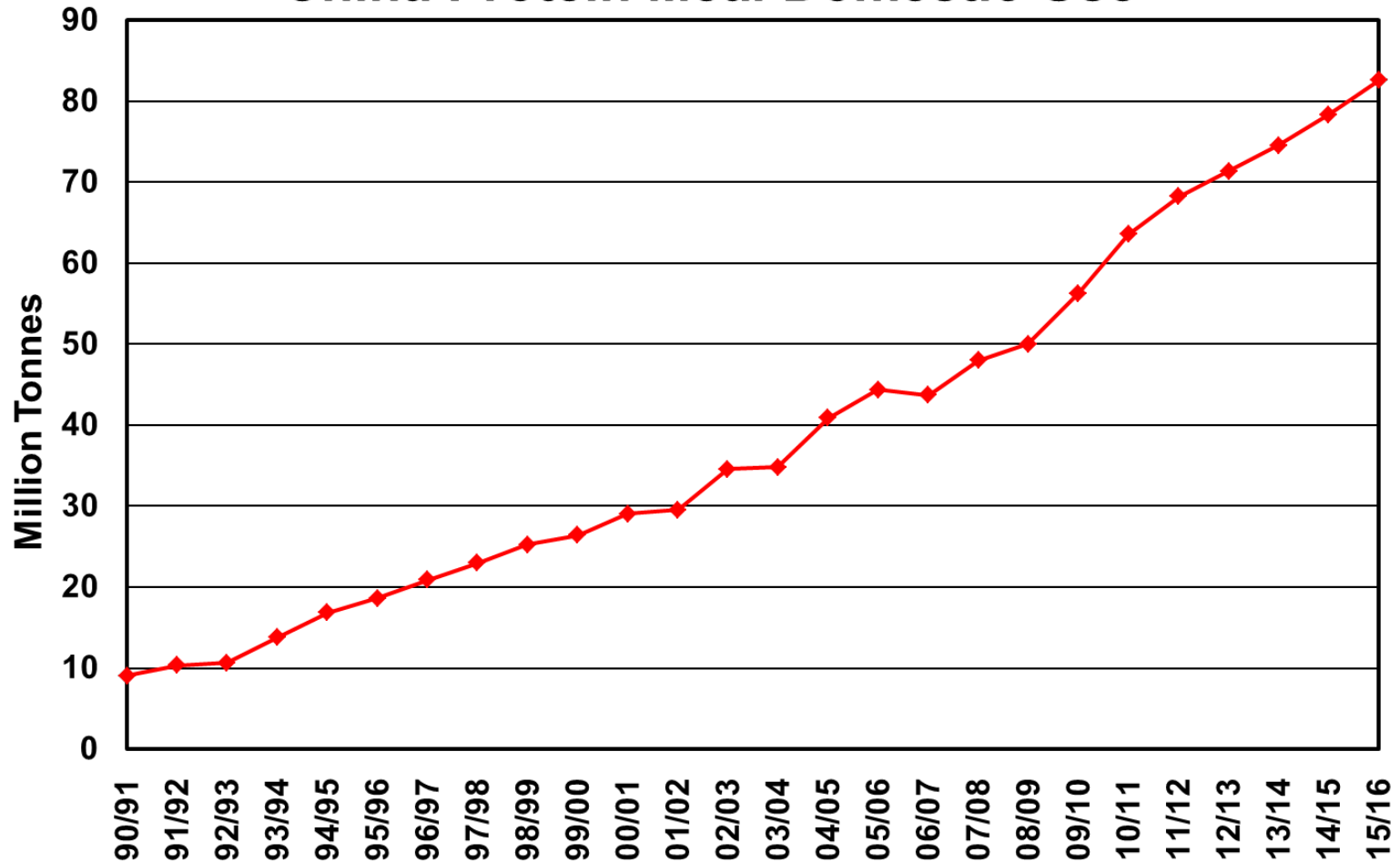
	2013/14	2014/15	2015/16	2016/17
SOYBEANS				
Harvested Area	27,737	30,173	32,093	33,700
Yield	2.94	2.85	3.00	3.00
Production	81,499	86,121	96,243	101,000
Crush	36,430	38,125	39,500	41,000
Exports	43,039	45,073	54,250	56,000
SOYBEAN MEAL				
Domestic Use	14,424	14,920	15,161	15,737
Exports	13,492	14,048	14,800	15,300
SOYBEAN OIL				
Food Use	3,839	3,925	3,791	3,722
Biodiesel	1,894	2,289	2,693	3,053
Exports	1,420	1,342	1,400	1,400

China Soybean Complex

(1,000 Tonnes/1,000 Hectares)

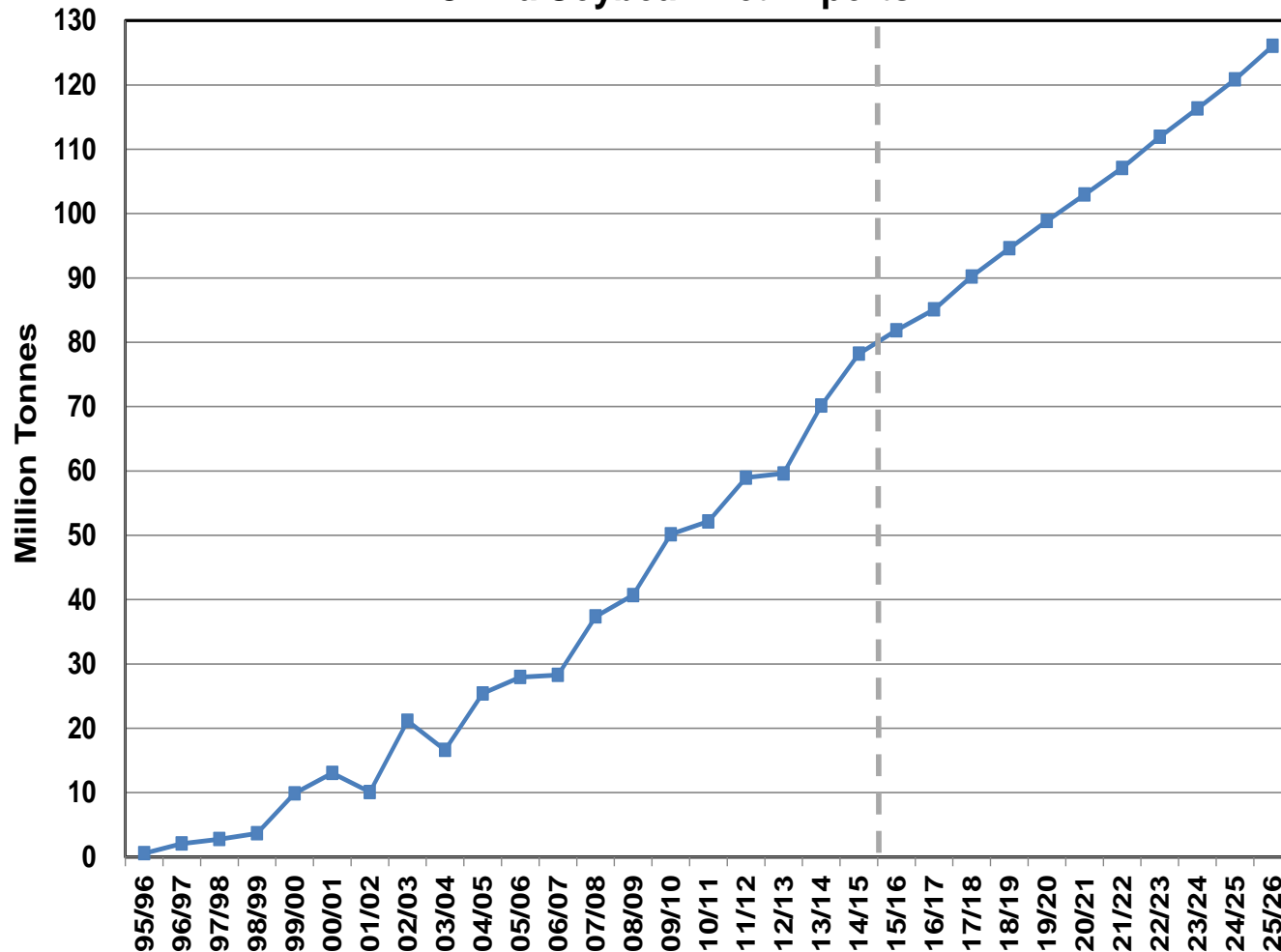
	2012/13	2013/14	2014/15	2015/16
SOYBEANS				
Harvested Area	7,172	6,850	6,800	6,550
Yield	1.82	1.78	1.82	1.79
Production	13,050	12,200	12,350	11,700
Imports	59,865	70,364	78,350	82,000
Crush	64,950	68,850	74,675	81,050
Food Use	9,450	9,650	10,000	10,200
Carryout	12,378	14,427	18,500	19,000
SOYBEAN MEAL				
Domestic Use	50,091	52,534	57,609	62,488
Exports	1,365	2,017	1,595	1,750
SOYBEAN OIL				
Imports	1,409	1,353	773	900
Domestic Use	12,545	13,657	14,139	15,332

China Protein Meal Domestic Use



China Demand is Still in Place

China Soybean Net Imports

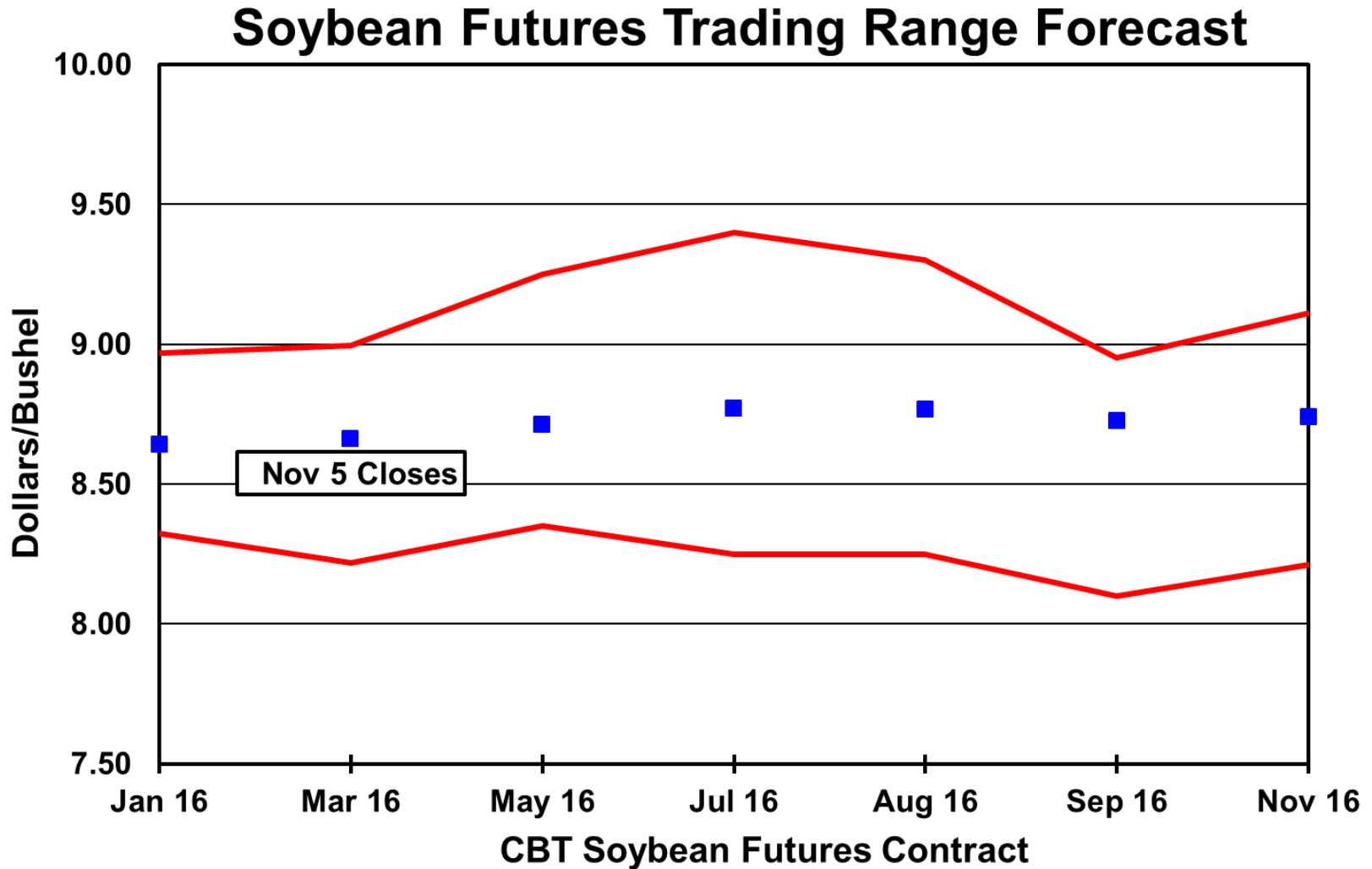


- China soybean imports forecast to grow from 80 MMT in 2015 crop year to 101 MMT by 2020 and 123 MMT by 2025

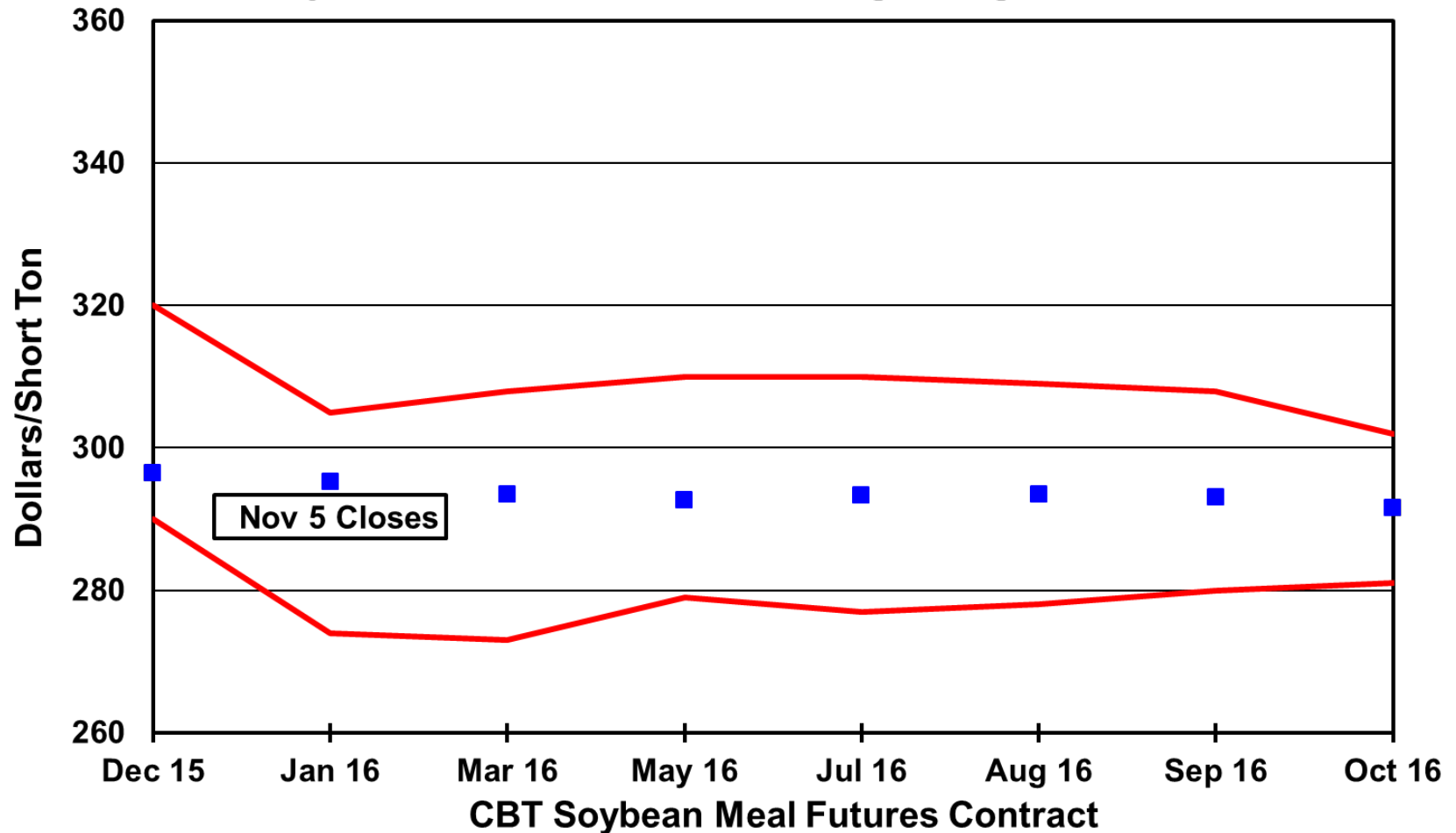
- Assumes per-capita protein meal usage grows at 3.5% per year

- Per-capita usage growth averaged 11% in 2009 & 2010, 5% from 2012 to 2014

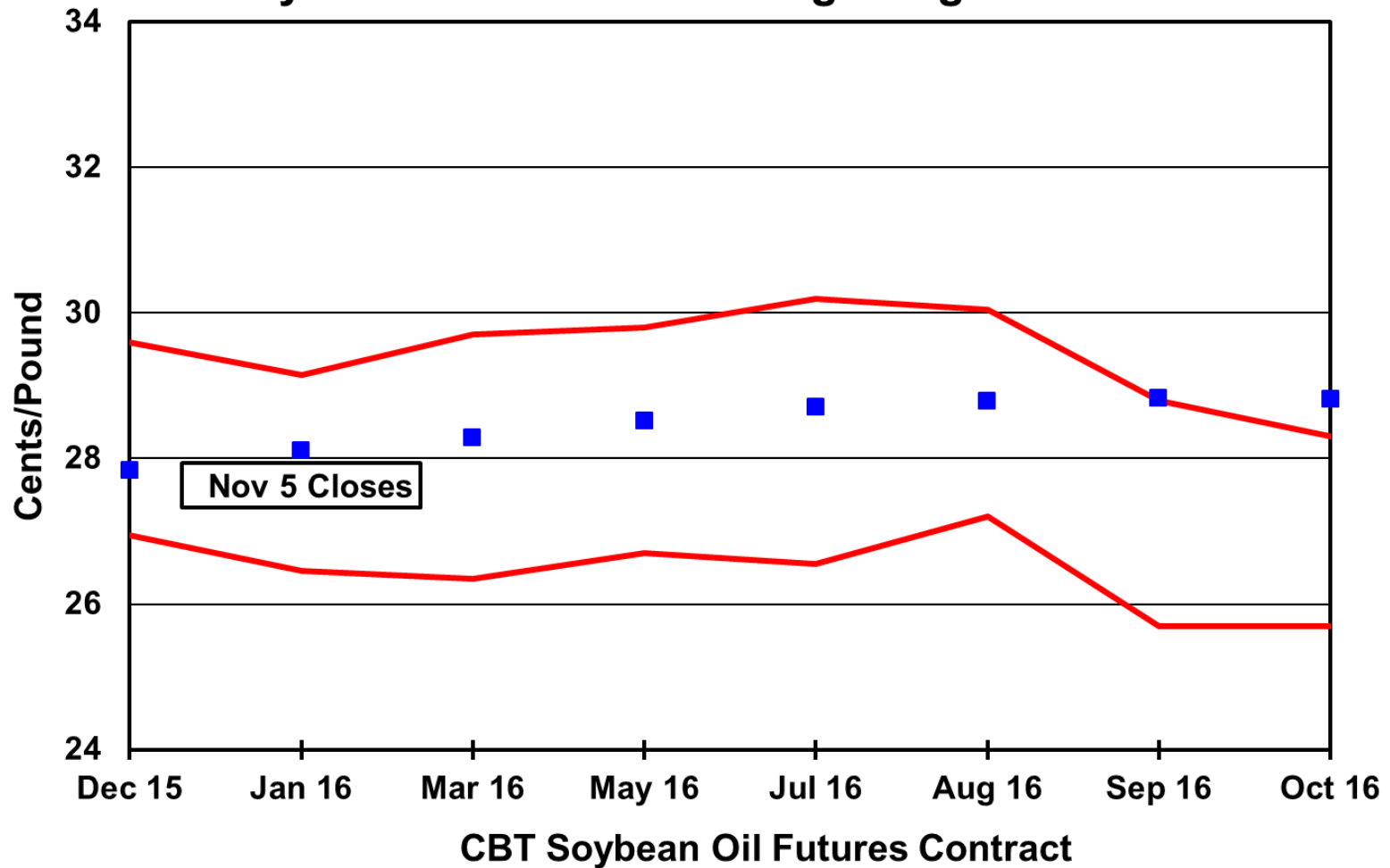
As S. Hemisphere Crop is Realized, Prices will Come Under Pressure



Soybean Meal Futures Trading Range Forecast



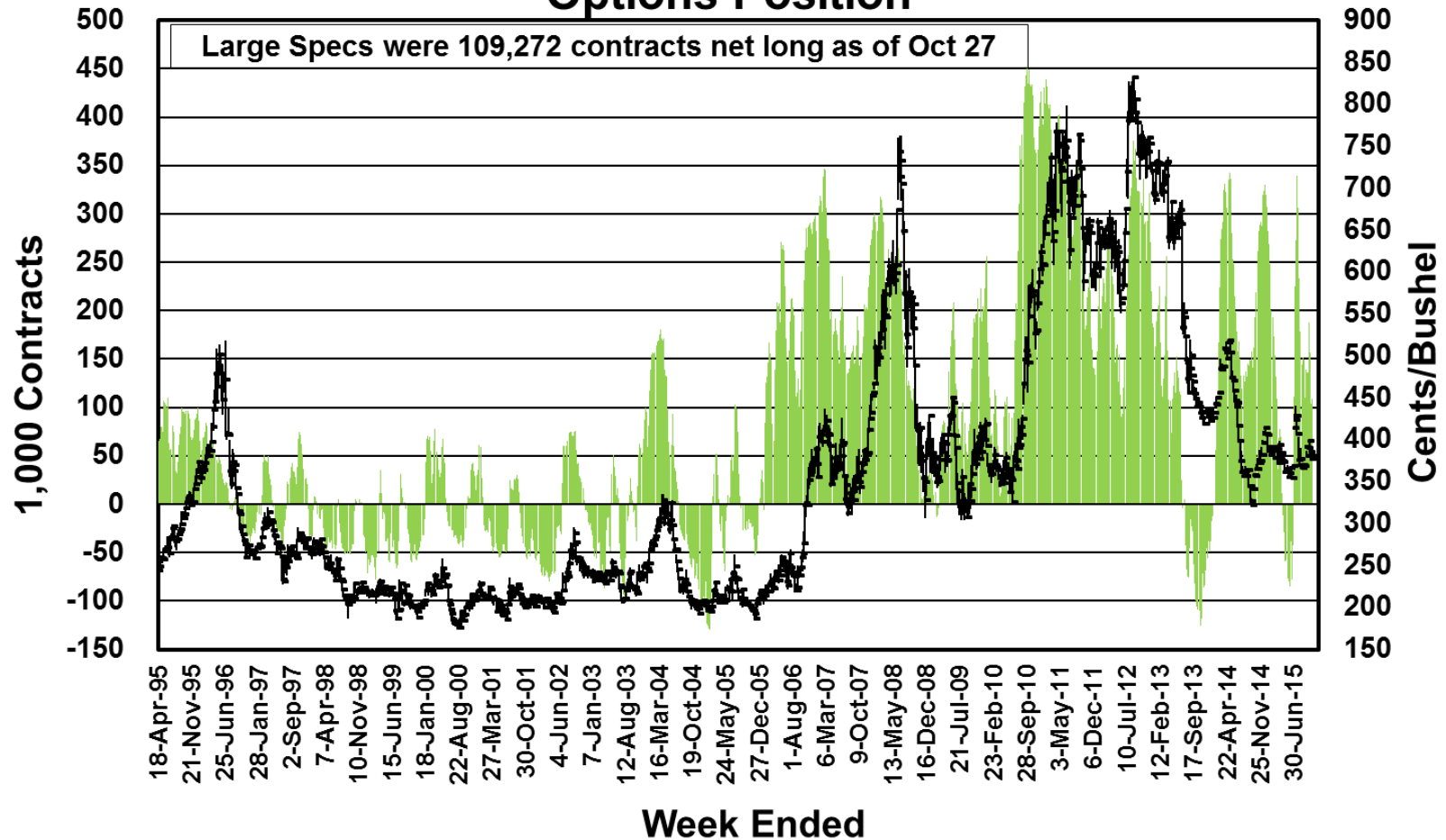
Soybean Oil Futures Trading Range Forecast



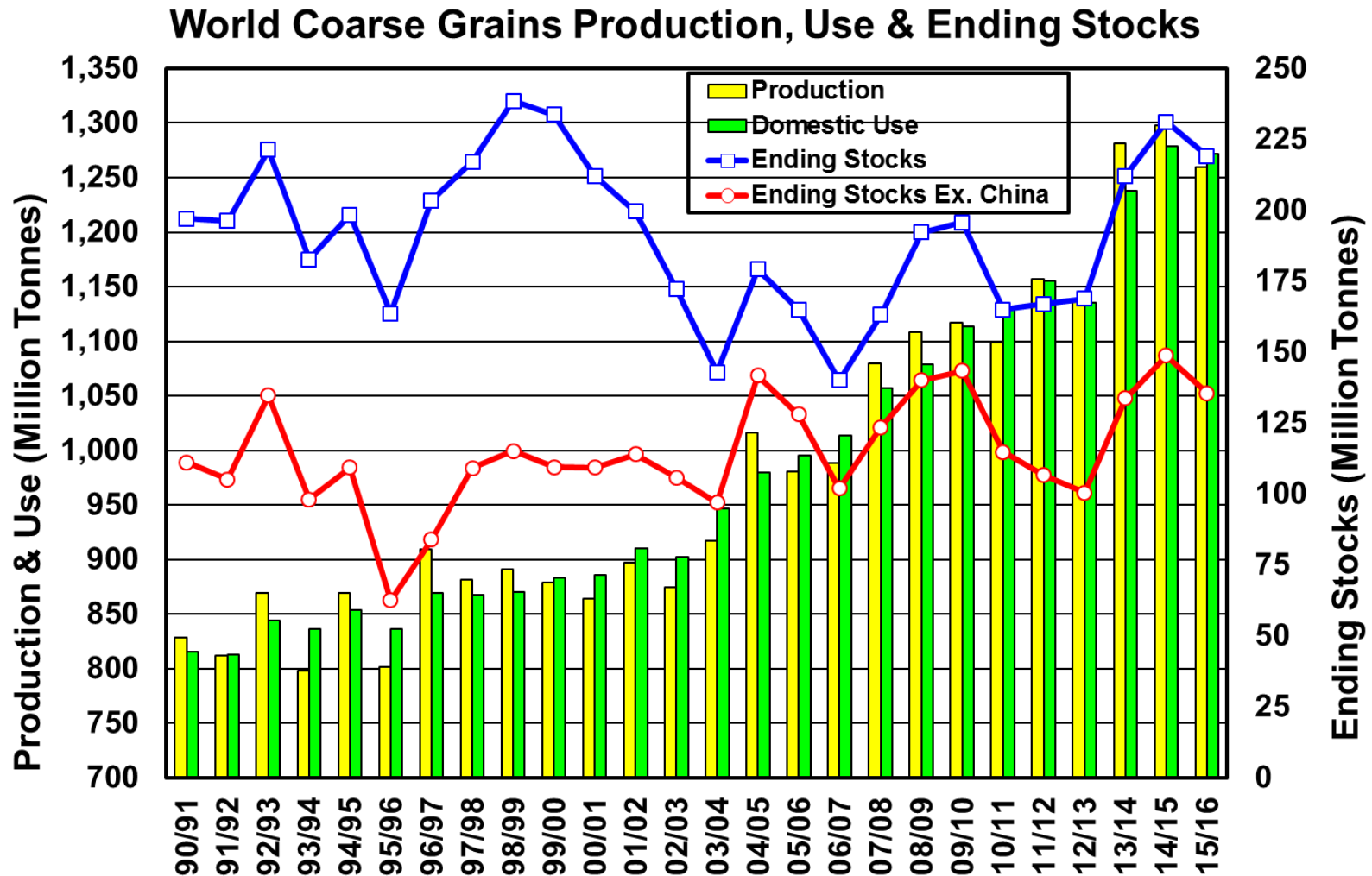
Feed Grains Outlook

Where Have Corn Futures Been?

Nearby Corn Futures vs. Large Spec Net Futures & Options Position



Decrease in Coarse Grains Production Largely Due to Corn



15/16 World Corn Trade Forecast Below 13/14 & 14/15



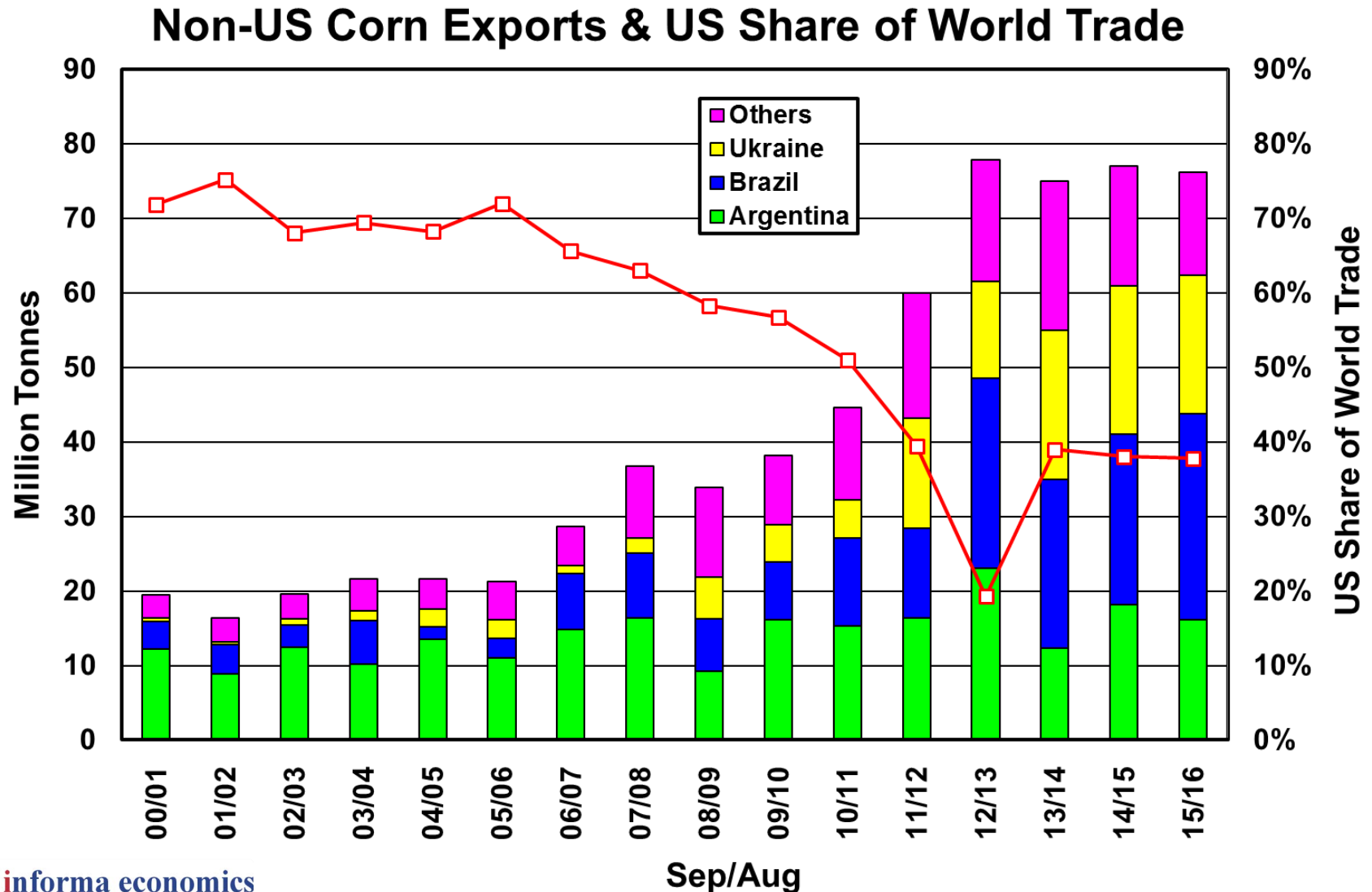
Risk to US Corn S & D is Potential Reduction to USDA's 15/16 Total Use Forecast, Corn Acres Up in 2016

US Corn Supply and Demand

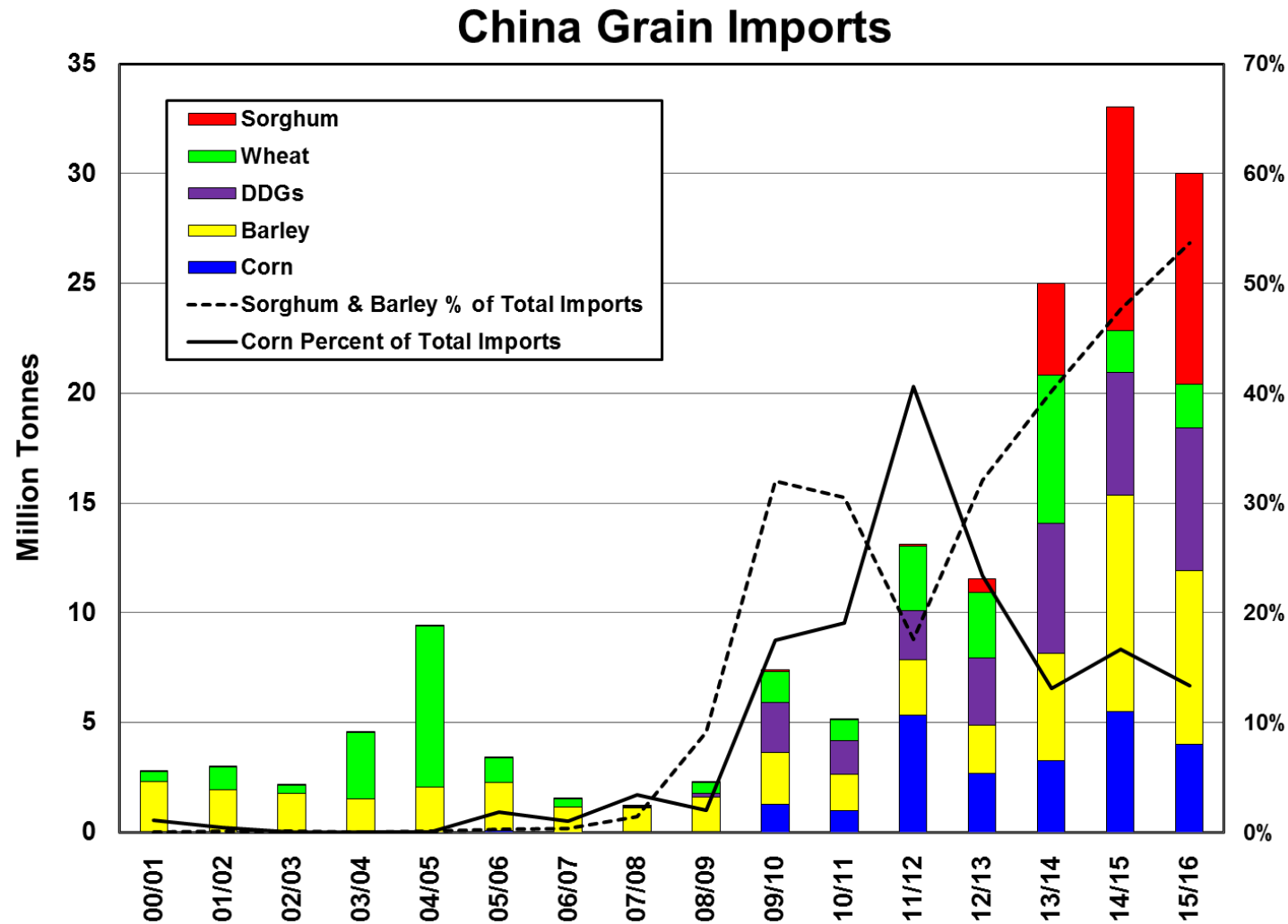
(Million Bushels/Million Acres)

	2012/13	2013/14	2014/15	2015/16		2016/17
				USDA	Informa	Informa
Planted Acres	97.3	95.4	90.6	88.4	88.4	90.8
Harvested Acres	87.4	87.5	83.1	80.7	80.7	83.4
Yield	123.1	158.1	171.0	168.0	170.1	168.9
Carryin	989	821	1,232	1,731	1,731	1,759
Production	10,755	13,829	14,216	13,555	13,718	14,079
Imports	160	36	32	30	30	30
Total Supply	11,904	14,686	15,479	15,316	15,479	15,868
Feed & Residual	4,315	5,040	5,315	5,275	5,275	5,450
Food/Seed/Ind	6,038	6,493	6,568	6,630	6,570	6,565
Ethanol for Fuel	4,641	5,124	5,209	5,250	5,200	5,200
Exports	730	1,920	1,864	1,850	1,875	1,900
Total Use	11,083	13,454	13,748	13,755	13,720	13,915
Carryout	821	1,232	1,731	1,561	1,759	1,953
Stocks/Use	7.4%	9.2%	12.6%	11.3%	12.8%	14.0%
Futures (\$/Bu.)	6.74	4.41	3.75		3.80	3.60
Farm Price (\$/Bu.)	6.89	4.46	3.70	3.50-4.10	3.80	3.50

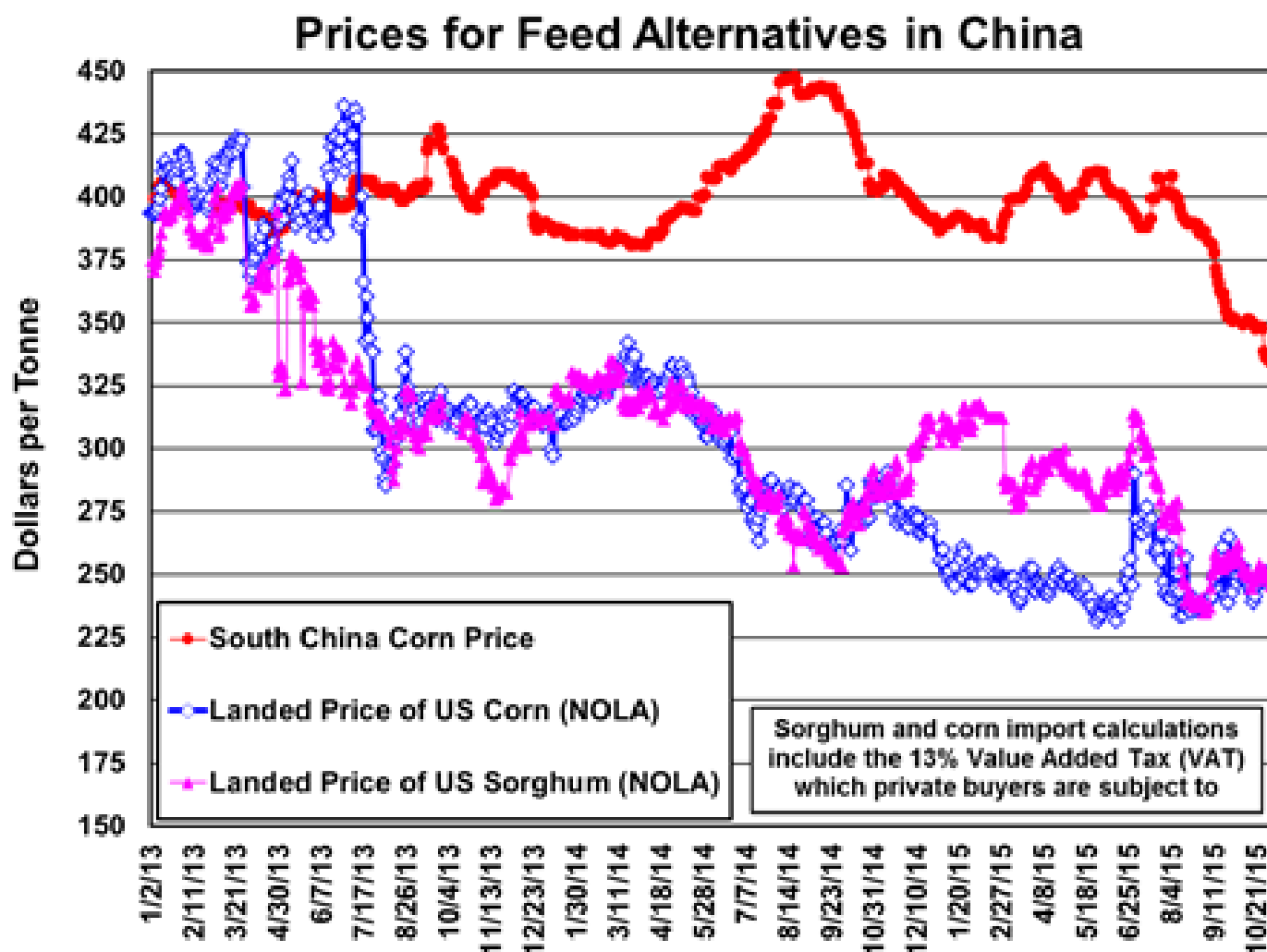
Large Non-US Corn Exports Keeping US Share of World Trade Flat in 15/16



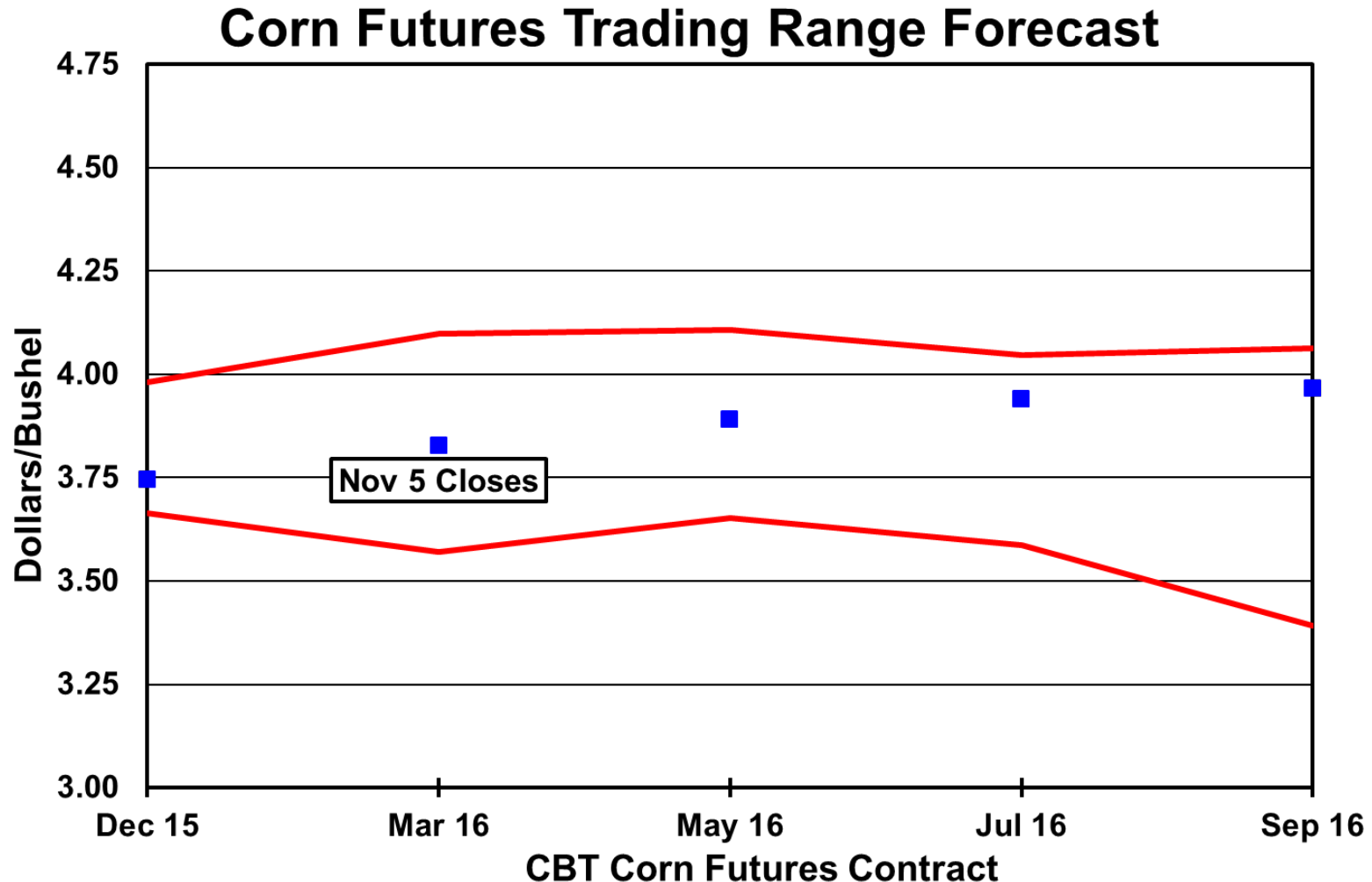
China's Grain Imports Have Grown--Change in Trend with Sorghum & Barley Accounting for Over 50% of Total Imports



China Policy Changes Could Change Export Trade Flow for Corn, Sorghum, and Barley if Domestic Corn Price Lowered

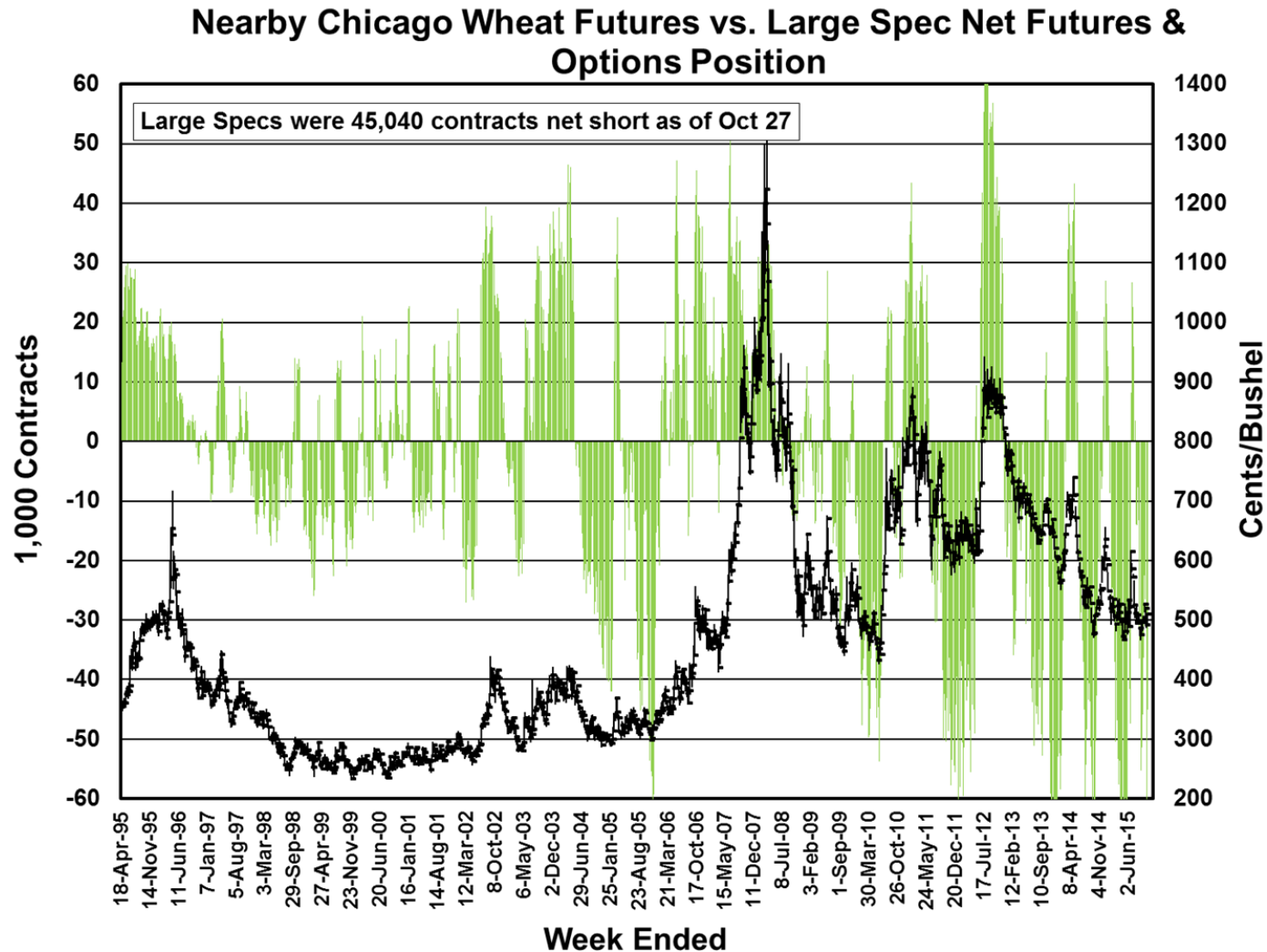


Seasonality Built in Through July--Forecast for Larger US Corn Crop in 2016 Could Result in Lower Prices July through September



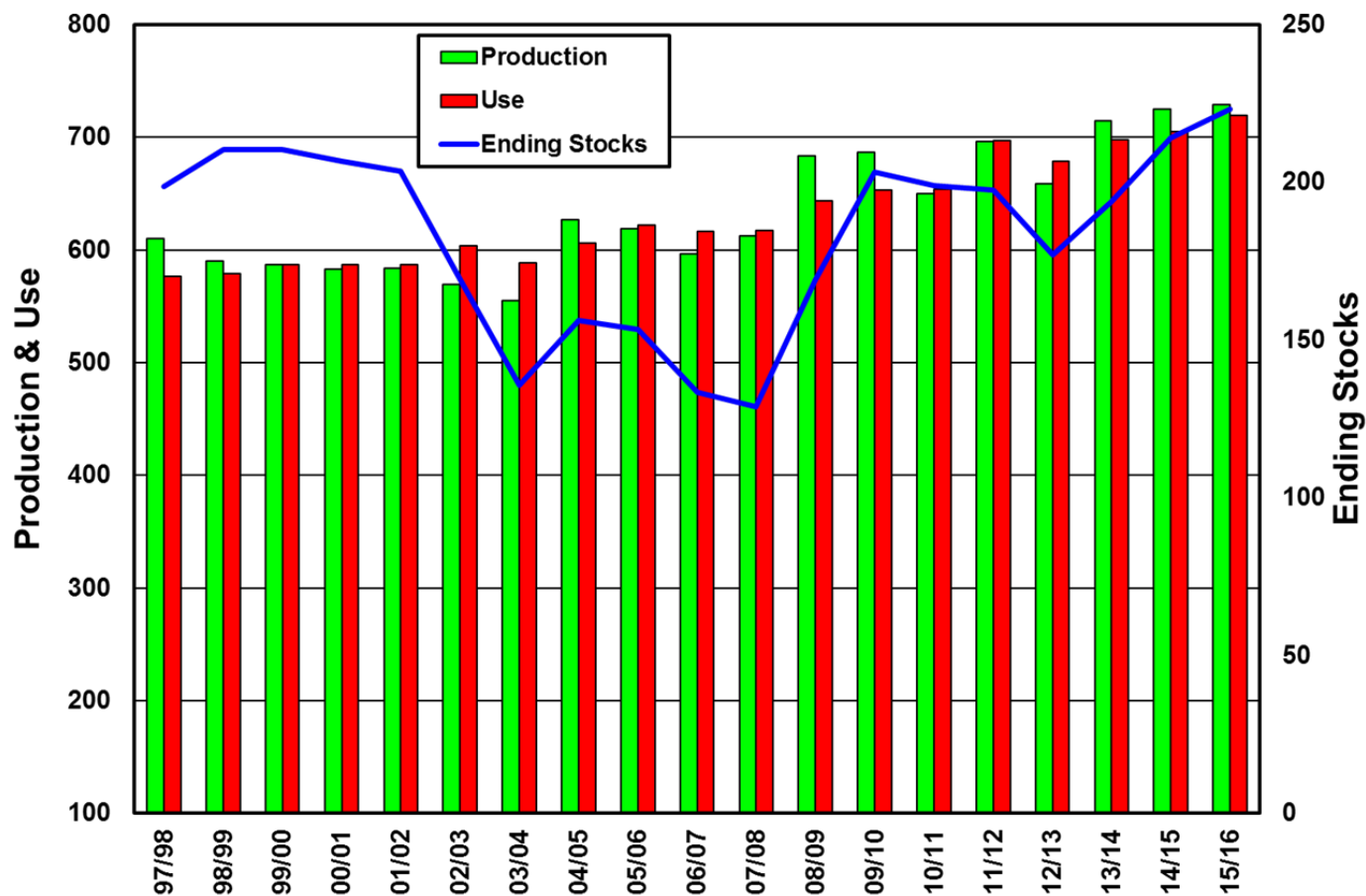
Wheat Outlook

Where Have Wheat Futures Been?

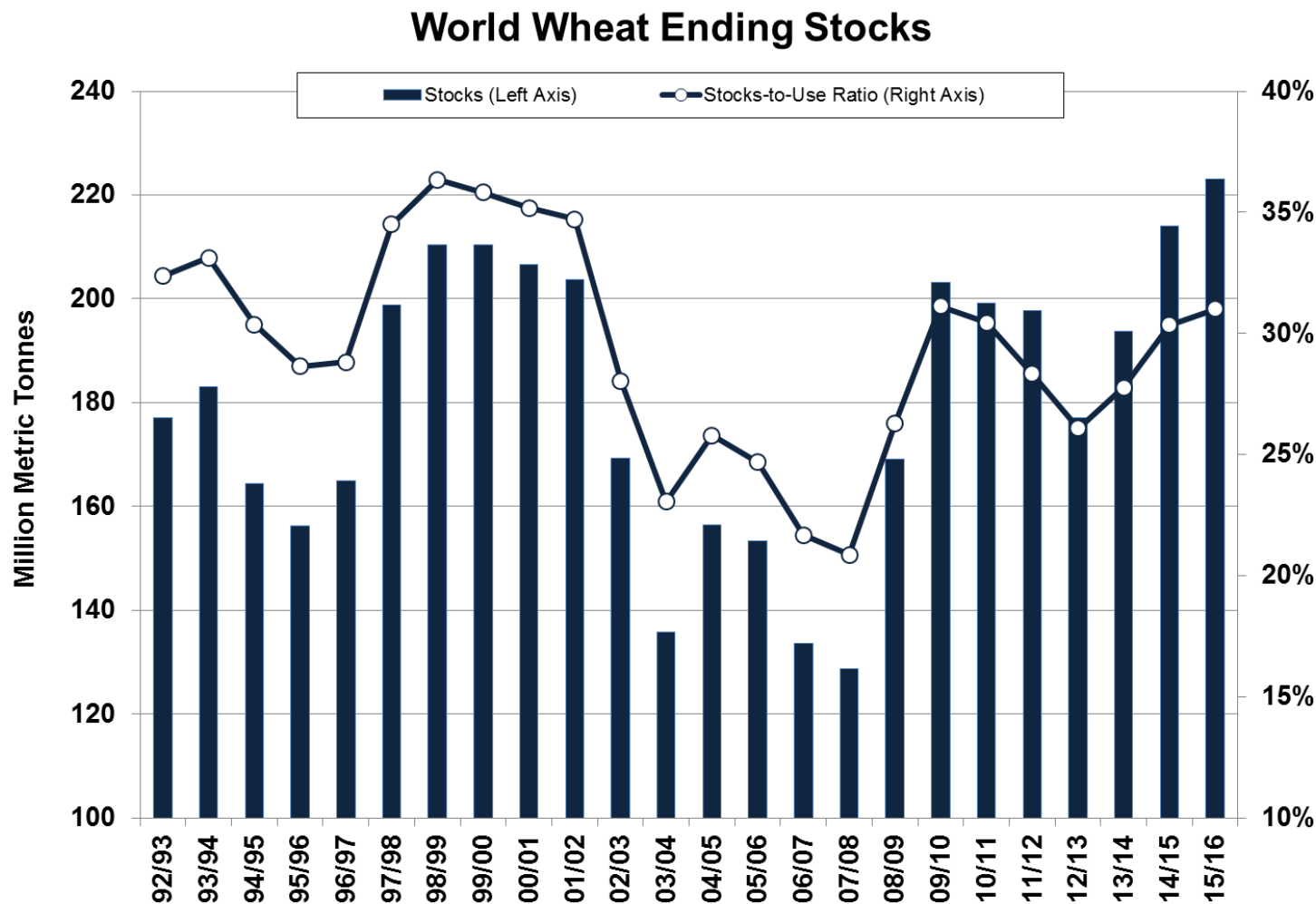


Record World Production & Ending Stocks Forecast for 15/16

World Wheat Supply and Demand
Million Tonnes

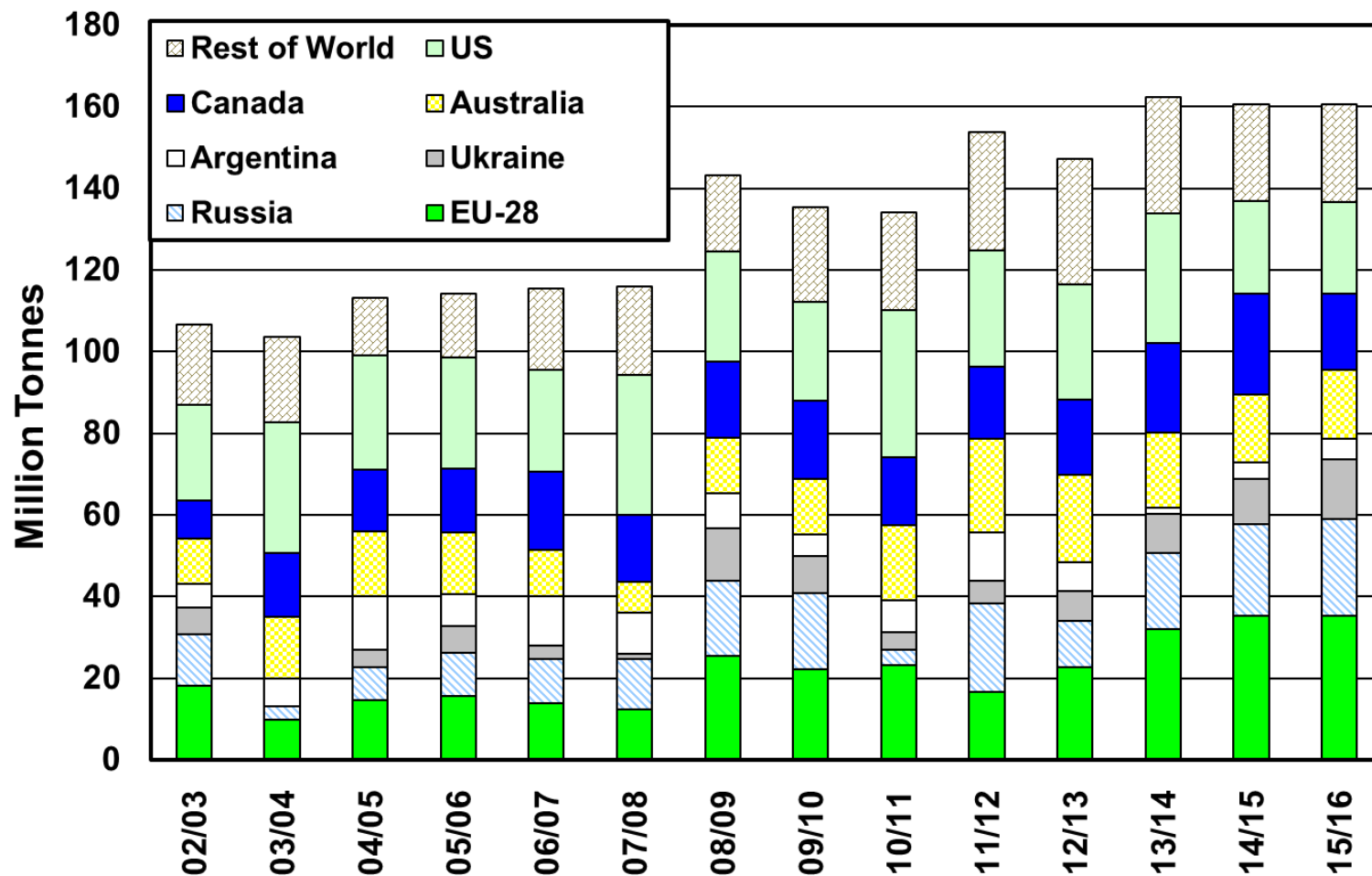


Stocks-to-Use Ratio Up Marginally, Stocks at a Record

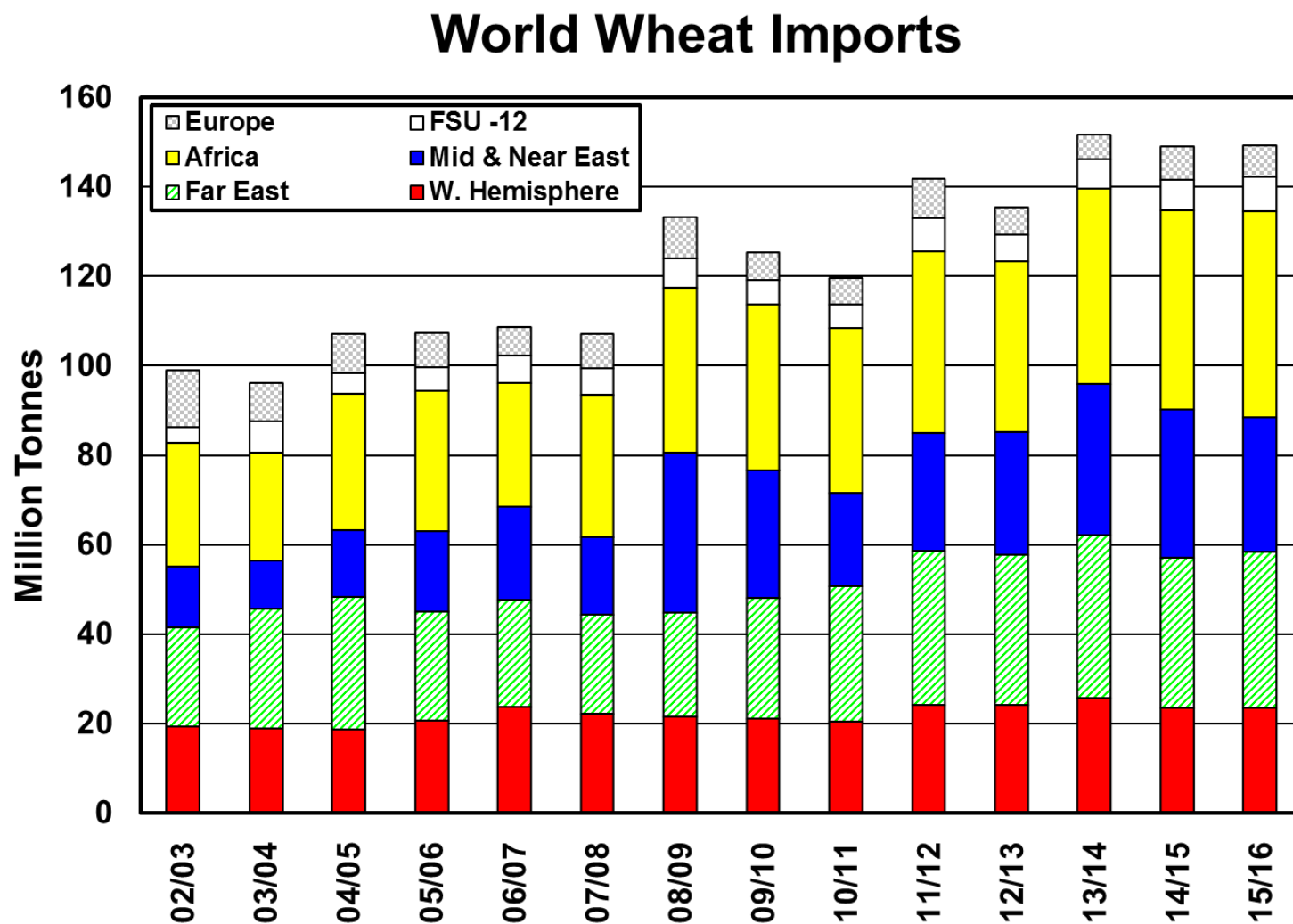


EU-28 Export Market Share Increasing

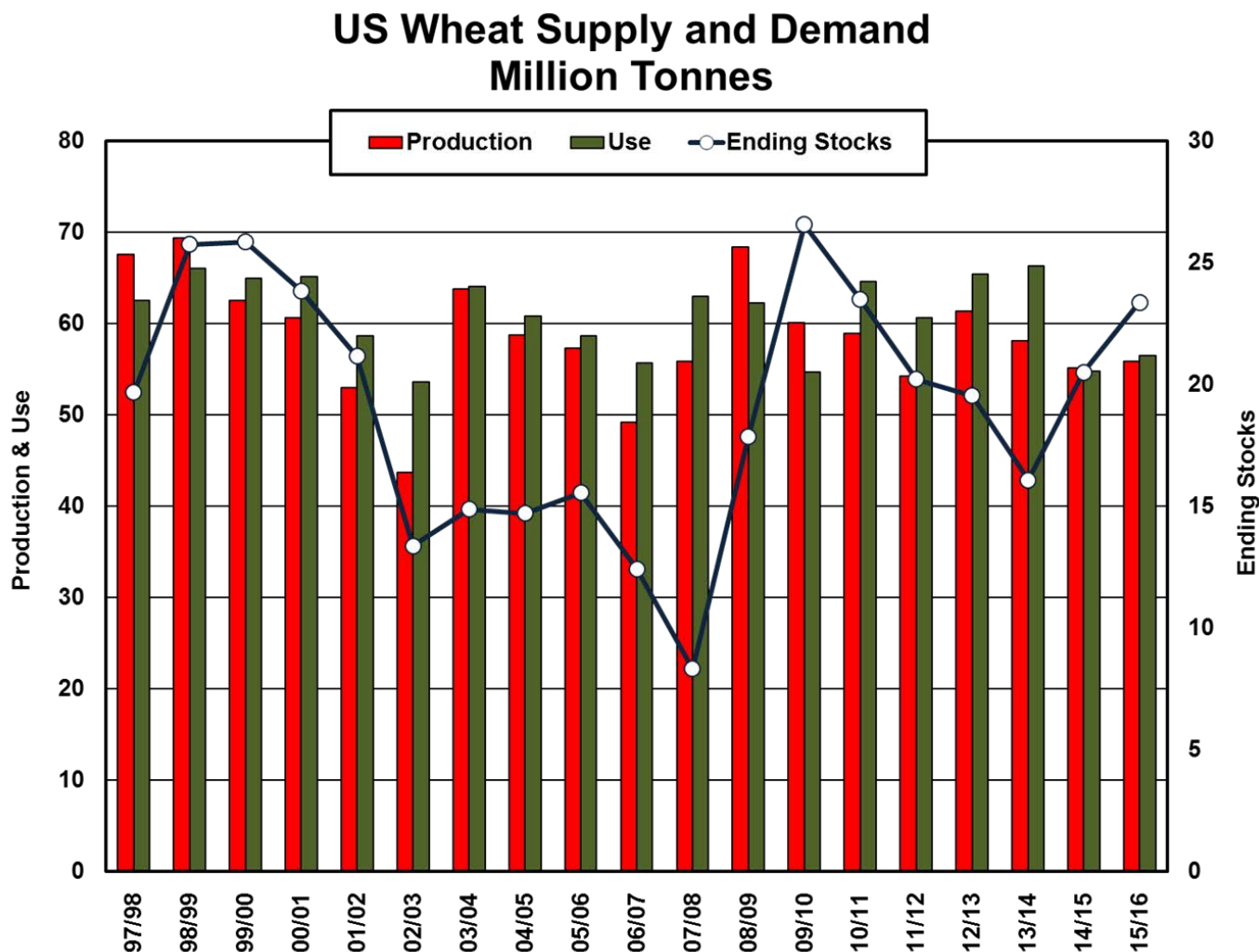
World Wheat Exports



Imports Forecast Flat--Largest Share for Africa



US Stocks Building, Weak Export Outlook



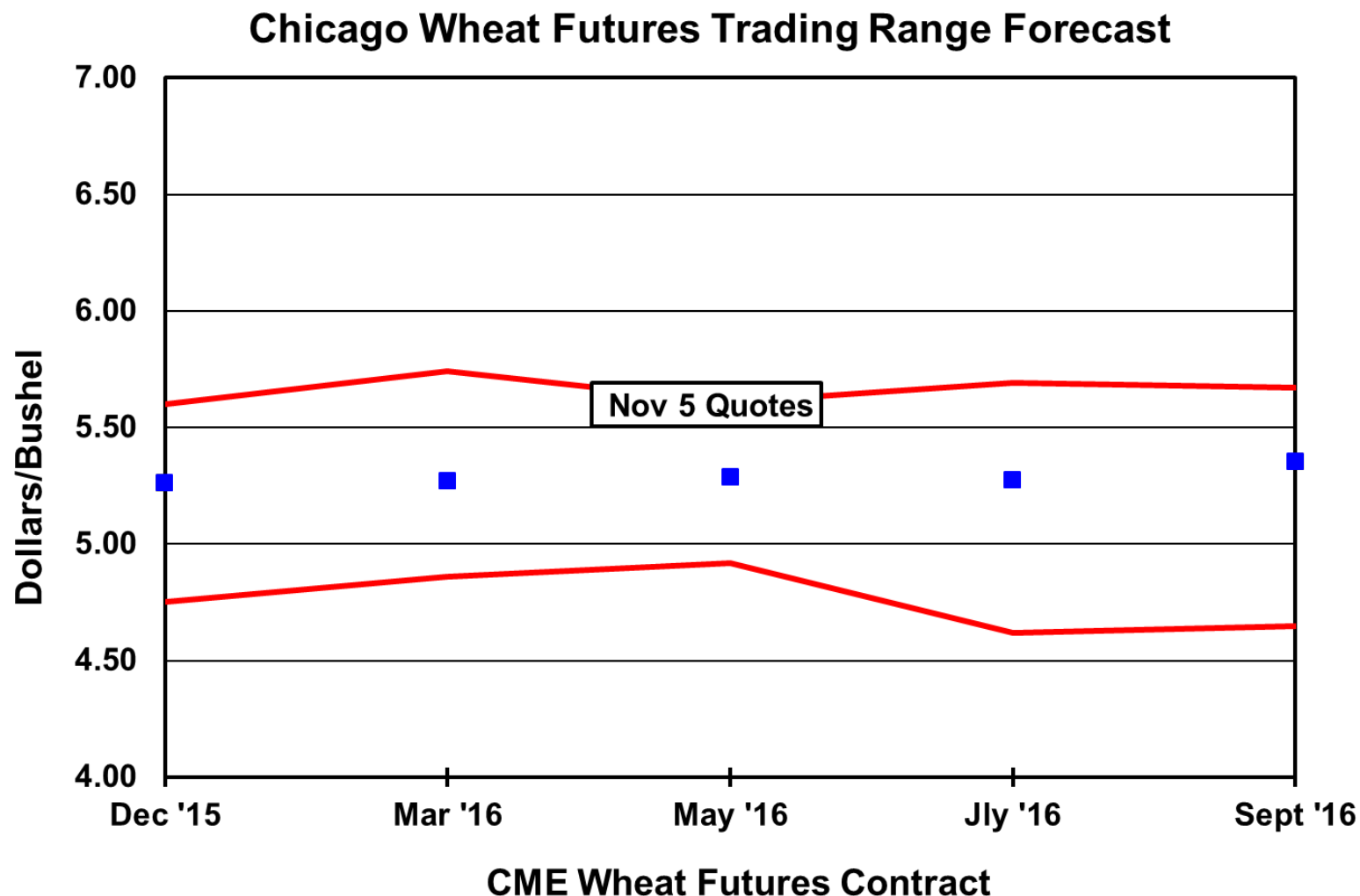
15/16 US Wheat Carryout Forecast Largest Since 10/11 with Lower Exports

US Wheat Supply and Demand

(Million Bushels/Million Acres)

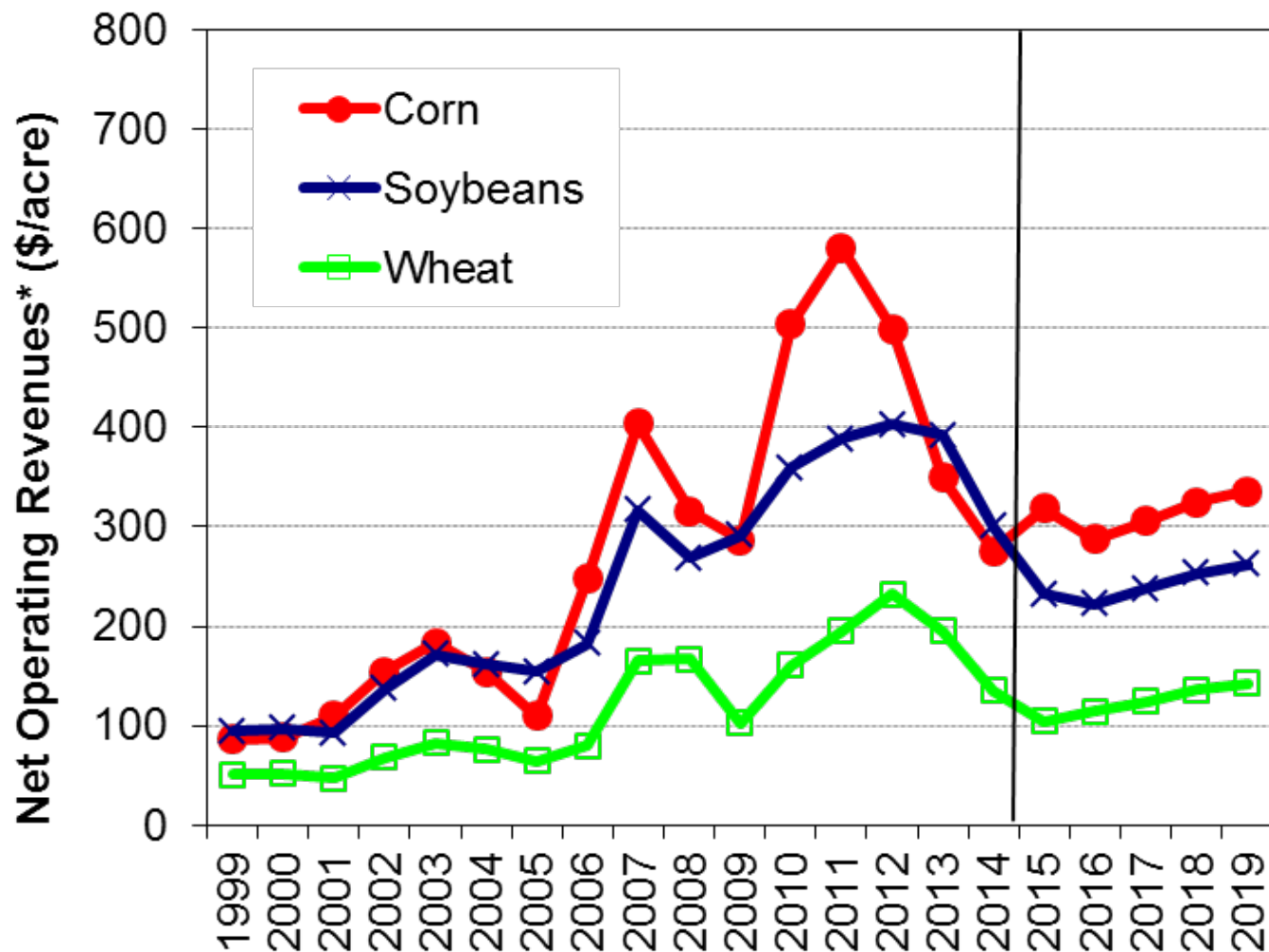
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16		2016/17
						USDA	Informa	Informa
Planted Acres	52.6	54.3	55.3	56.2	56.8	54.6	54.6	54.0
Harvested Acres	46.9	45.7	48.8	45.3	46.4	47.1	47.1	46.3
Yield	46.1	43.6	46.2	47.1	43.7	43.6	43.6	45.8
Carryin	976	863	743	718	590	753	753	859
Production	2,163	1,993	2,252	2,135	2,026	2,052	2,052	2,120
Imports	97	113	124	172	149	125	130	135
Total Supply	3,236	2,969	3,119	3,025	2,766	2,930	2,935	3,114
Food Use	926	941	951	955	958	967	965	970
Seed Use	71	76	73	77	81	72	71	72
Feed & Residual	84	158	365	227	120	180	215	200
Domestic Use	1,081	1,176	1,389	1,259	1,159	1,219	1,251	1,243
Exports	1,292	1,051	1,012	1,176	854	850	825	1,025
Total Use	2,373	2,227	2,401	2,435	2,013	2,069	2,076	2,267
Carryout	863	743	718	590	753	861	859	846
Stocks to Use	36.4%	33.4%	29.9%	24.2%	37.4%	24.2%	24.2%	37.3%
CBOT Futures (\$/Bu.)	7.05	6.50	7.87	6.53	5.34		5.20	4.95
Farm Price (\$/Bu.)	5.70	7.24	7.77	6.87	5.99	5.00	5.15	4.95

Higher Upside Risk for Wheat Futures Looking Forward



Farm Economics

US Corn, Soybean and Wheat Net Operating Revenue



Thank You!
Questions