

Soybean Outlook

2015 Southern Outlook Conference

Atlanta, GA

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Overview

- Supply
 - Domestic
 - Global
- Demand
- Exchange Rates
- Summary and Prices
 - Price trends
 - Futures
 - 2016 Outlook

U.S. SUPPLY

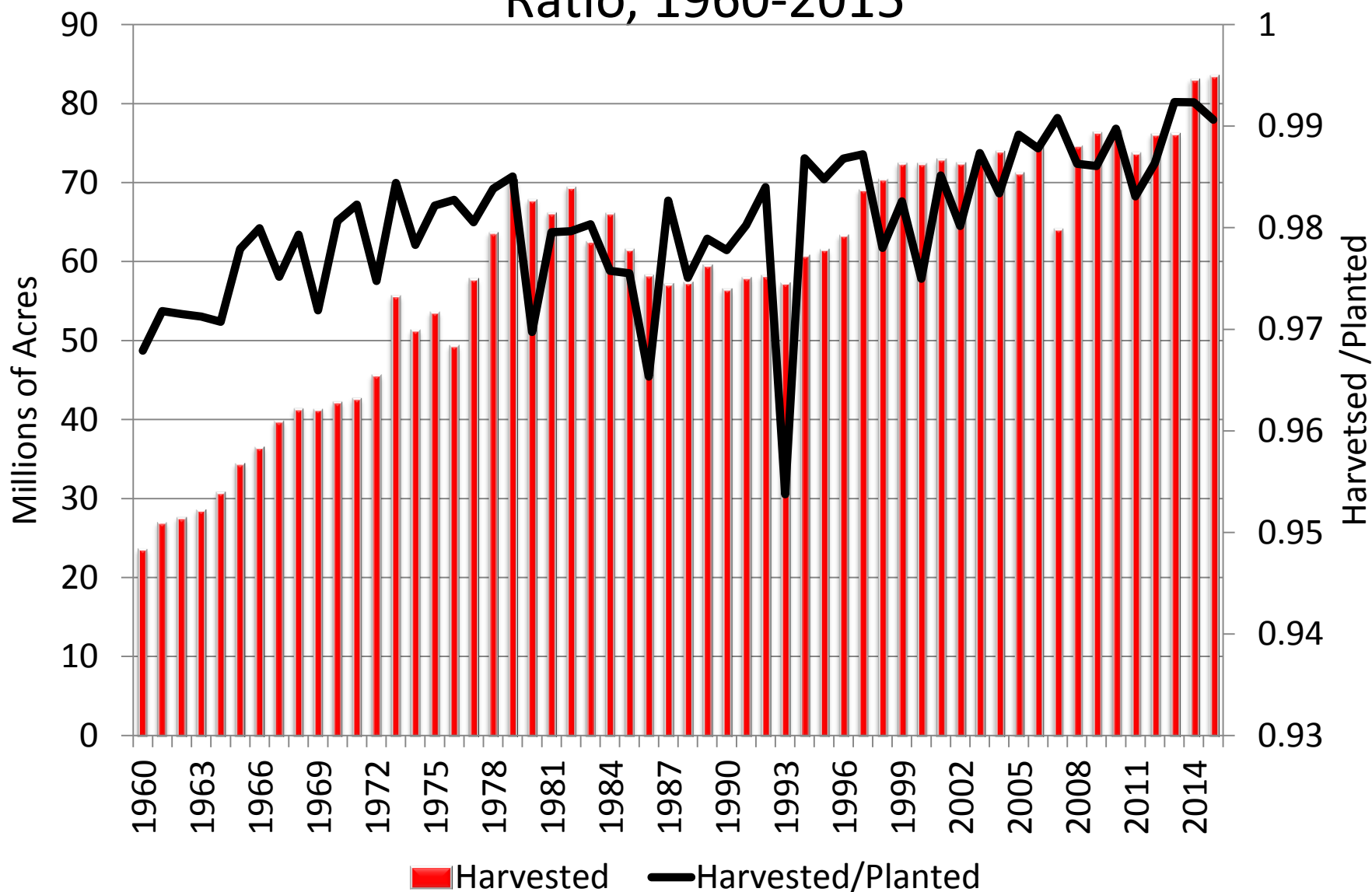
Southeast Planted Acreage

<u>State</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>% Change</u>
Arkansas	3,200,000	3,270,000	3,240,000	3,200,000	(1.2)
Mississippi	1,970,000	2,010,000	2,220,000	2,350,000	5.9
Kentucky	1,480,000	1,670,000	1,760,000	1,850,000	5.1
North Carolina	1,590,000	1,480,000	1,750,000	1,850,000	5.7
Tennessee	1,260,000	1,580,000	1,640,000	1,850,000	12.8
Louisiana	1,130,000	1,130,000	1,420,000	1,600,000	12.7
Virginia	590,000	610,000	660,000	670,000	1.5
Alabama	340,000	440,000	485,000	490,000	1.0
South Carolina	380,000	320,000	450,000	420,000	(6.7)
Oklahoma	420,000	345,000	365,000	410,000	12.3
Georgia	220,000	235,000	300,000	360,000	20.0
Texas	125,000	105,000	155,000	110,000	(29.0)
Florida	21,000	32,000	39,000	35,000	(10.3)
Total	12,726,000	13,227,000	14,484,000	15,195,000	4.9

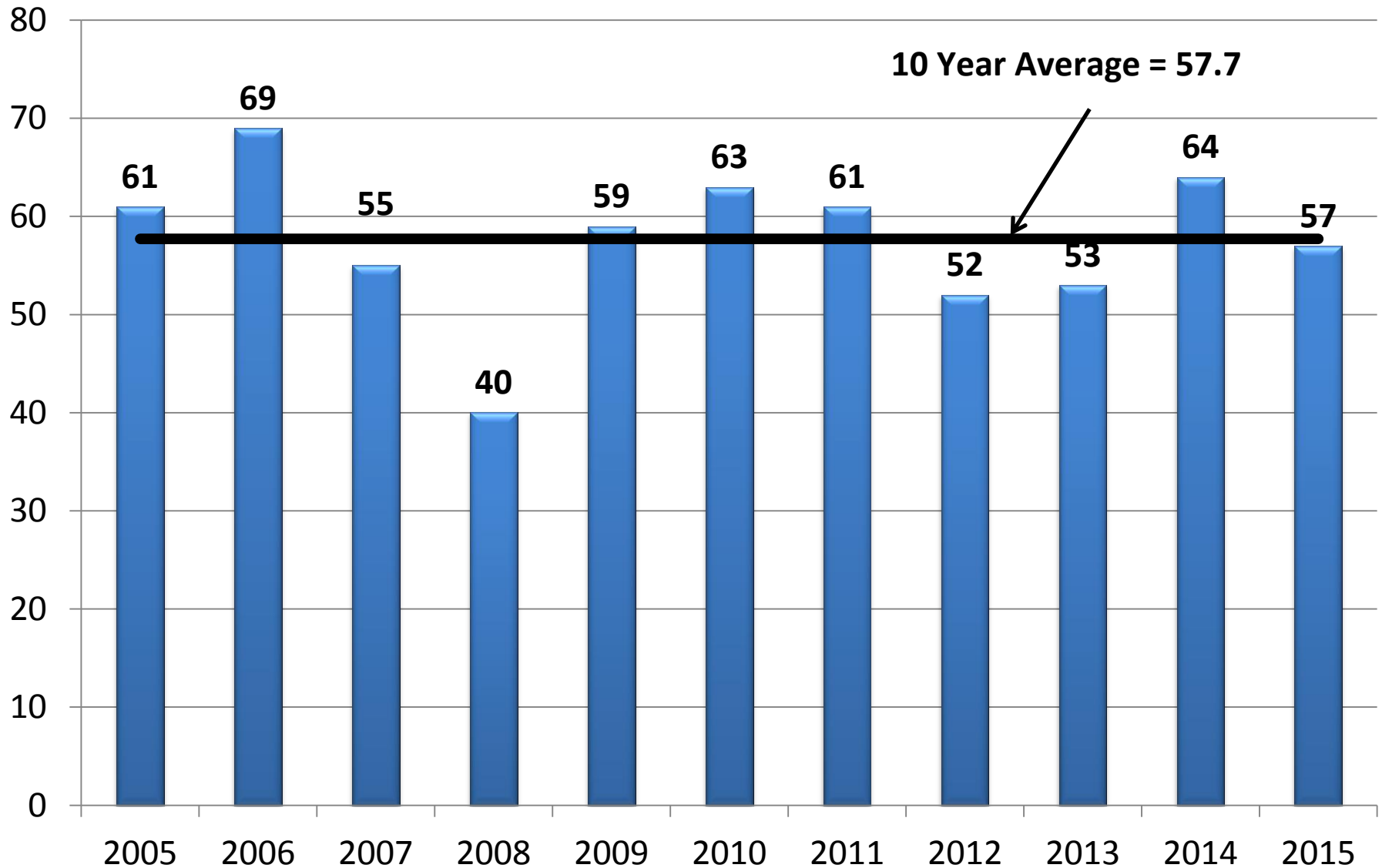
Southeast Soybean Yields

State	2014	2015	% Change
ALABAMA	40	41	3%
ARKANSAS	50	53	6%
GEORGIA	40	44	10%
KENTUCKY	48	50	4%
LOUISIANA	57	45	-21%
MISSISSIPPI	52	48	-8%
NORTH CAROLINA	40	33	-18%
OKLAHOMA	29	26	-10%
SOUTH CAROLINA	35	29	-17%
TENNESSEE	46	45	-2%
TEXAS	38.5	29	-25%
VIRGINIA	39.5	39	-1%

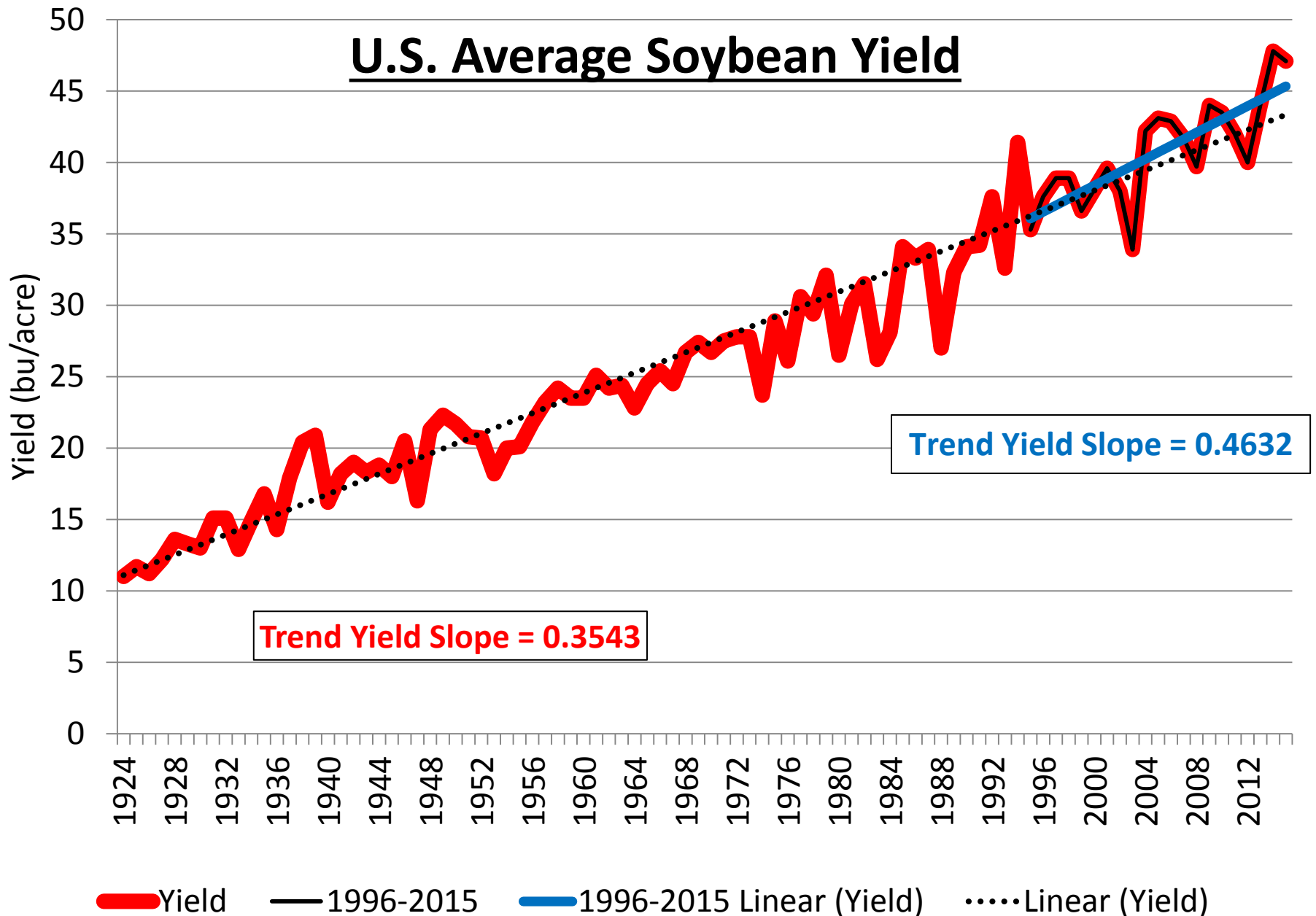
U.S. Harvested Acreage and Harvested-to-Planted Ratio, 1960-2015



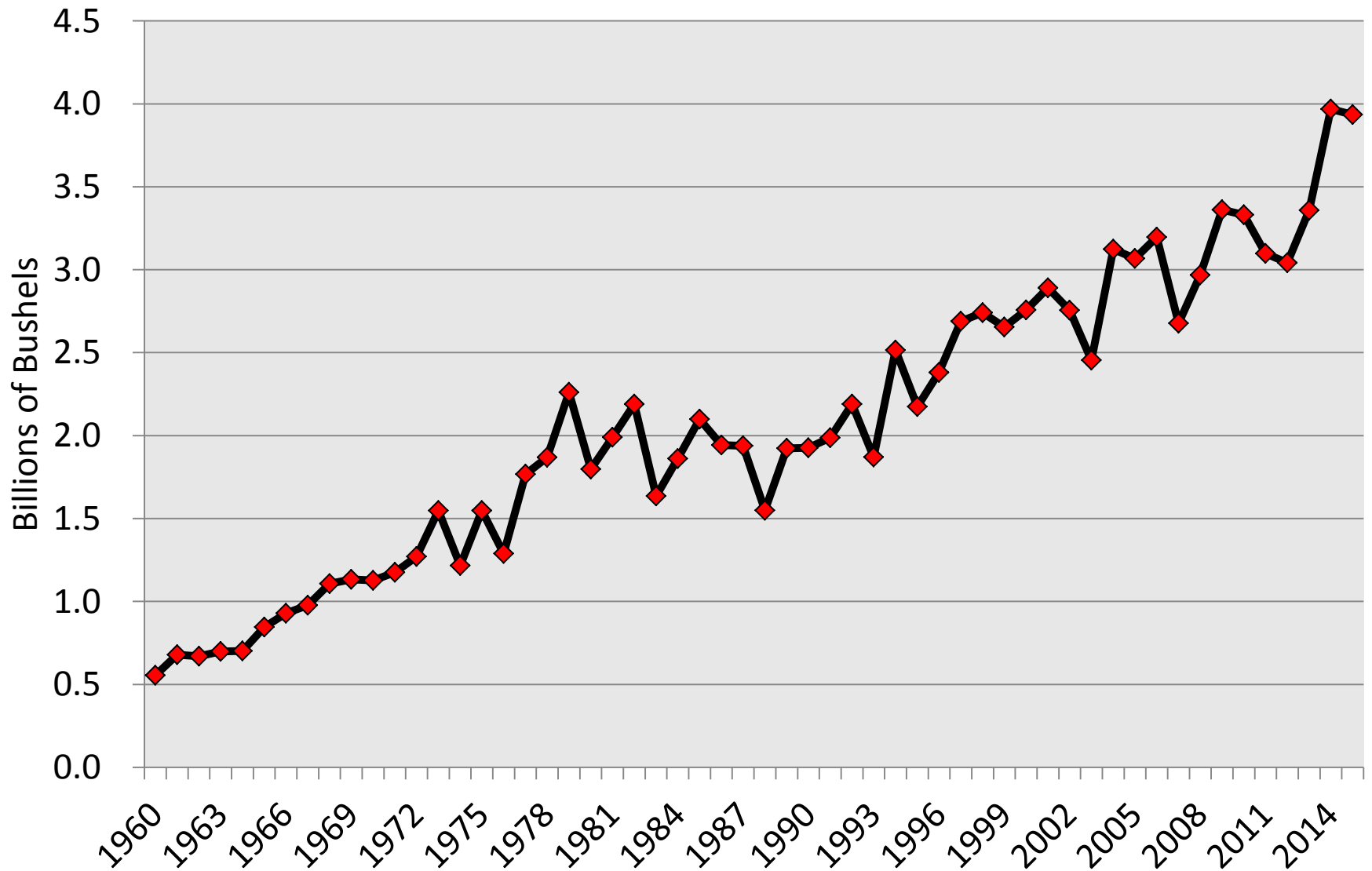
U.S. Soybeans, Percent Good-to-Excellent, Week #38, Sep 20



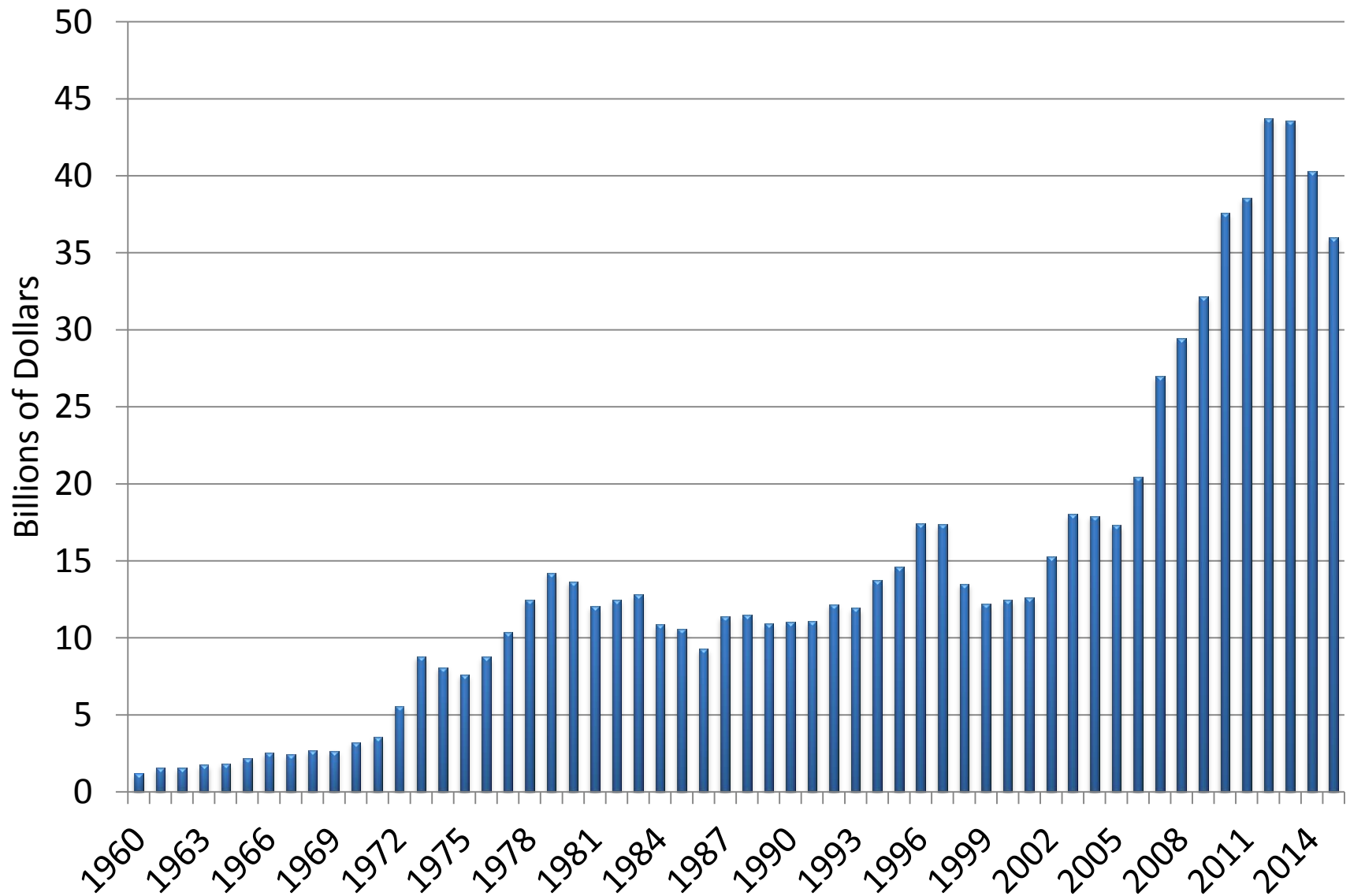
U.S. Average Soybean Yield



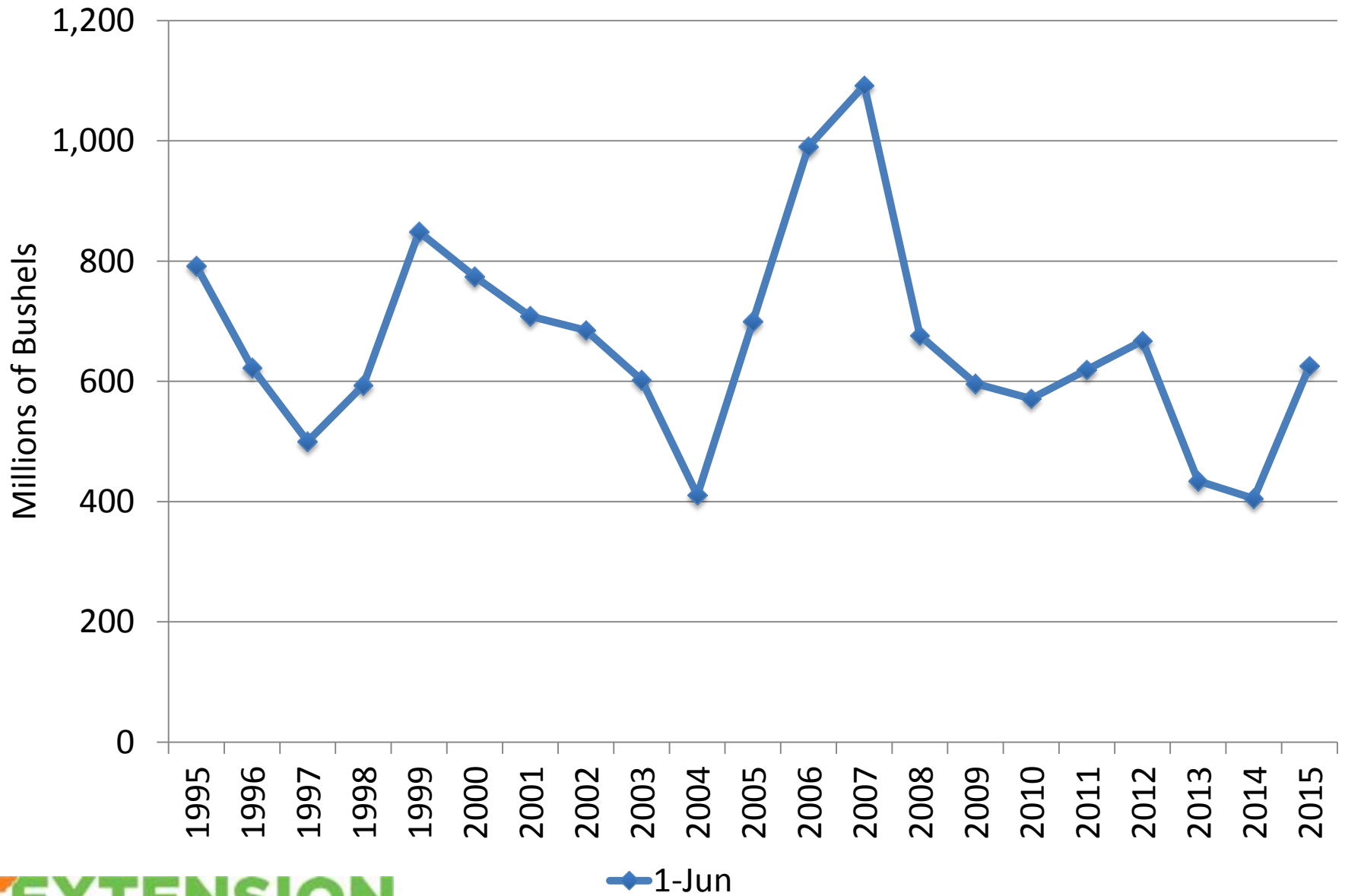
U.S. Production (bu), 1960-2015



U.S. Production (\$), 1960-2015



U.S. Soybean Stocks Jun 1, 1995-2015

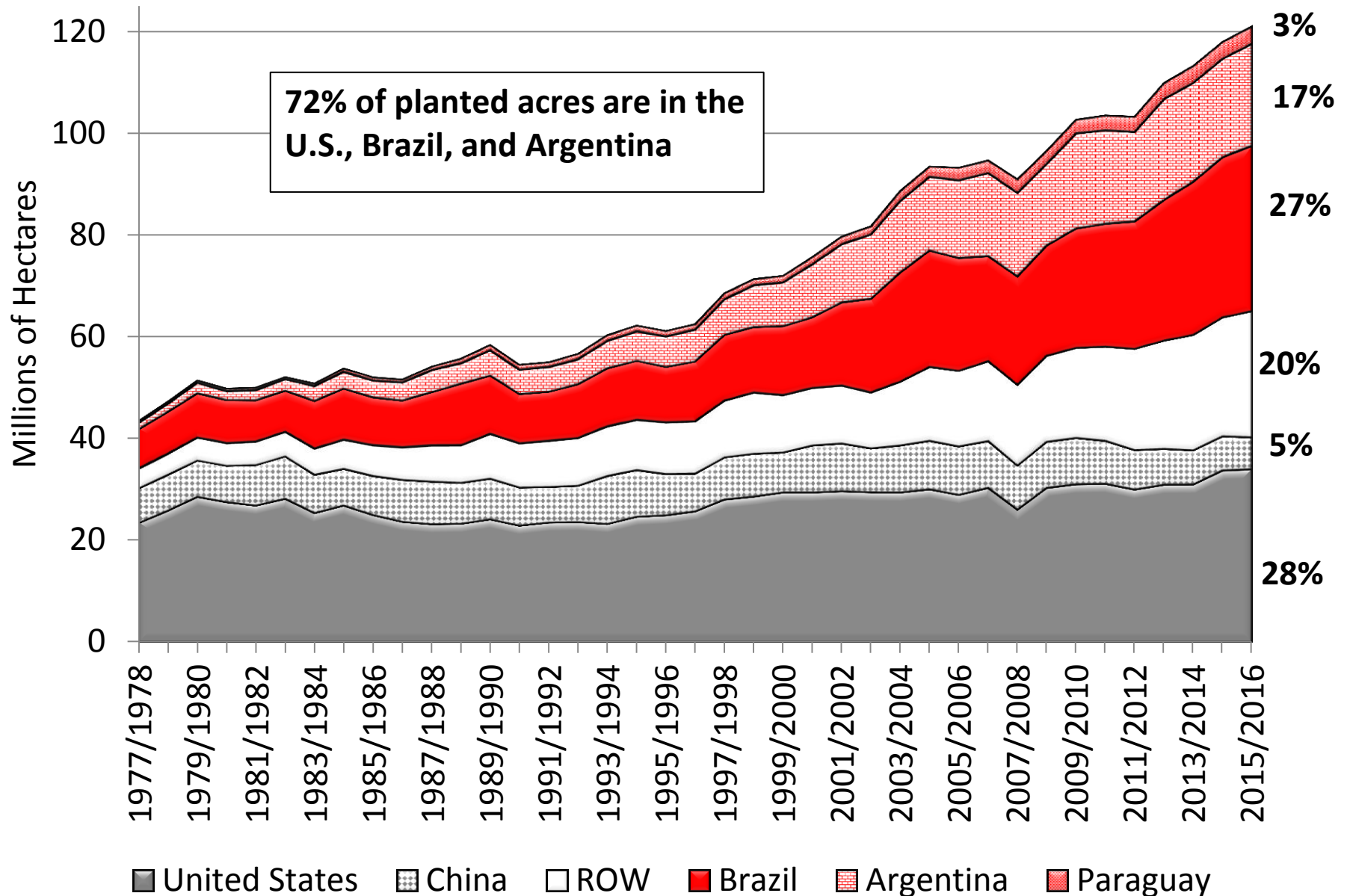


U.S. Supply (2015)

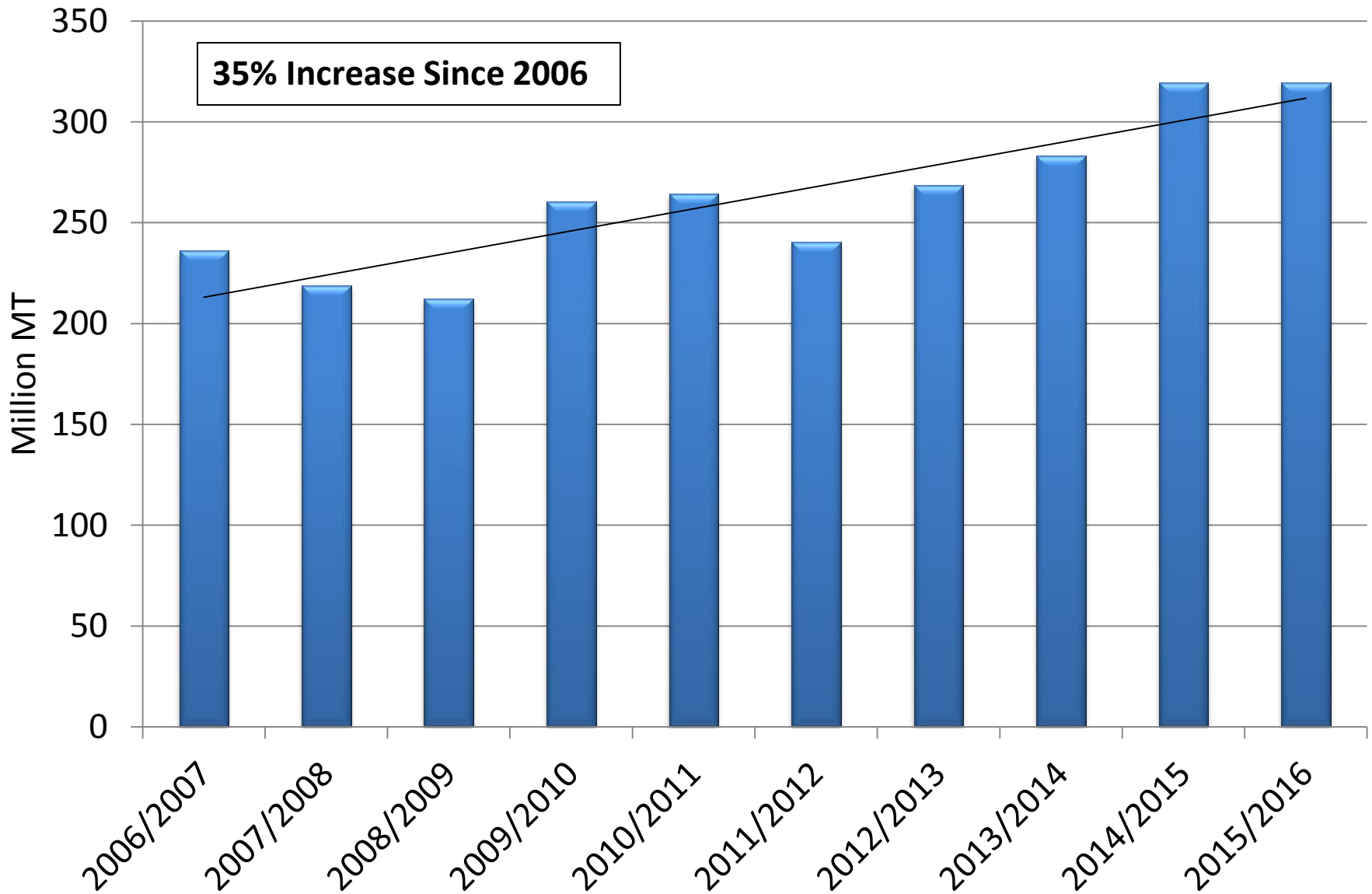
- U.S. harvested acreage up for the fourth straight year (up 4.9% in the Southeast 2014 to 2015)
- Yield above trend line in back-to-back years (variable yields are anticipated this fall due to the wet spring)
- Overall a rough start to-and highly variable growing season
- Production in bushels is up – production in \$ down
- Domestic stocks building

Global Supply

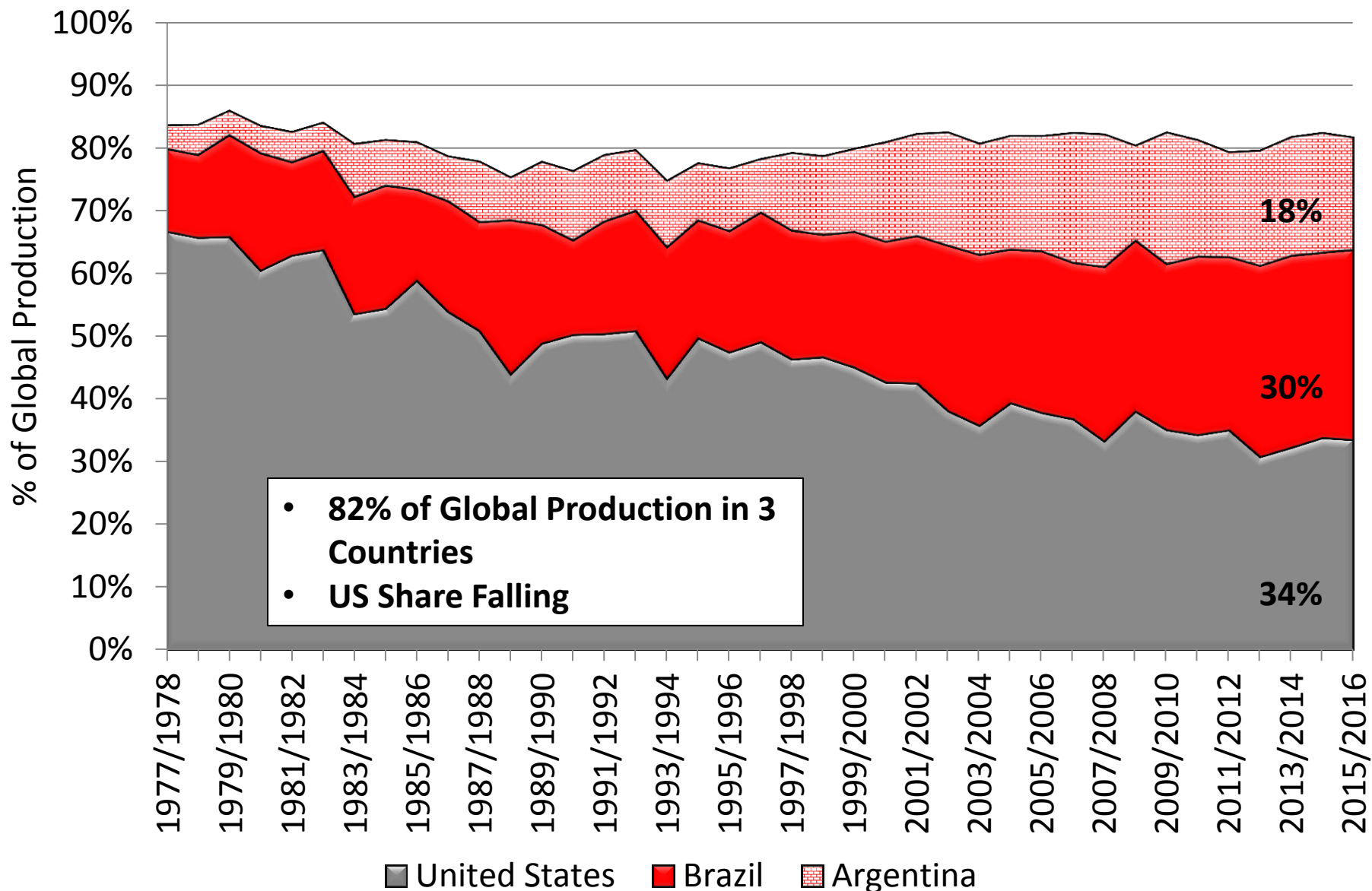
Global Hectares Planted, 1977-2015



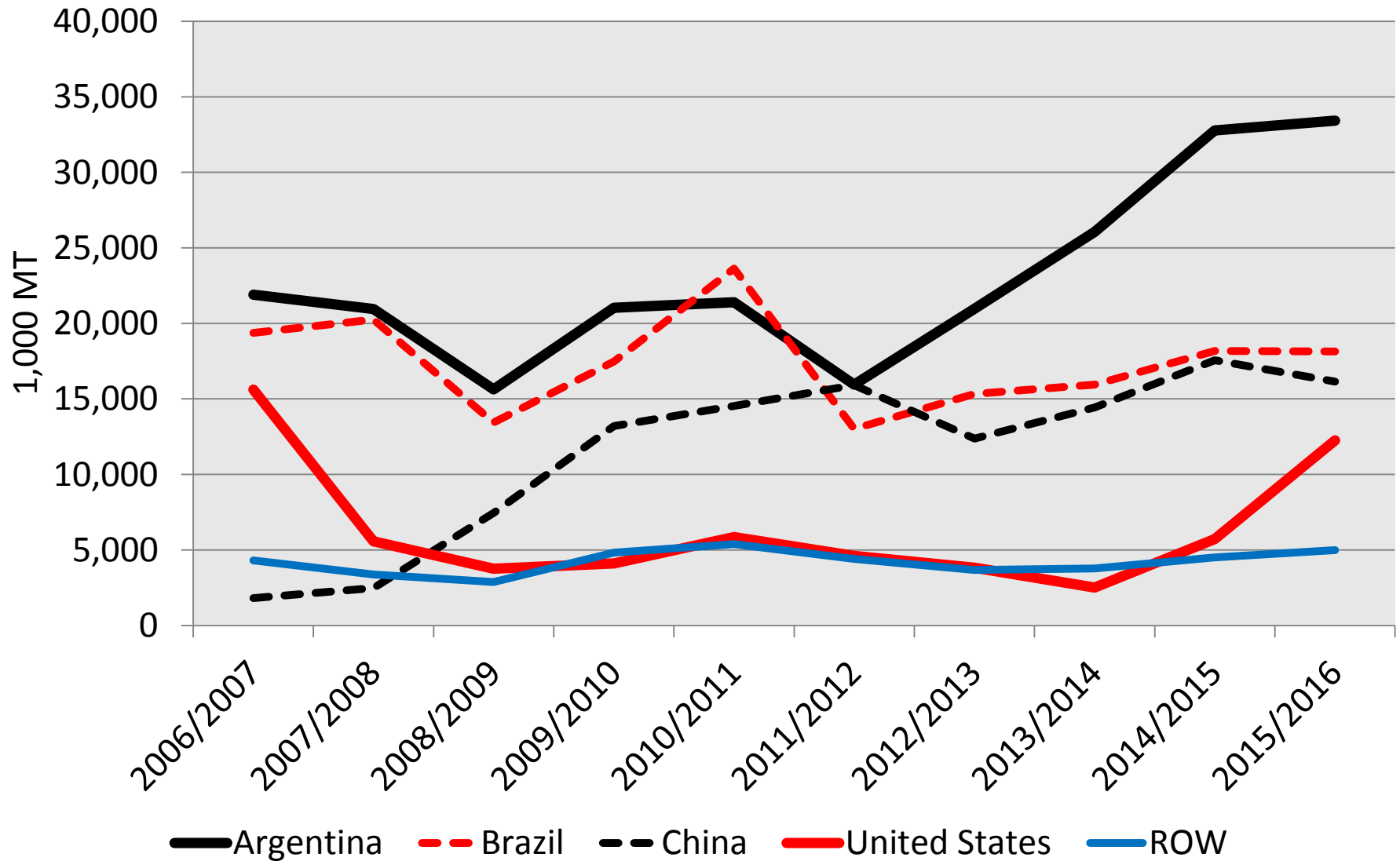
World Soybean Production, 2006-2015



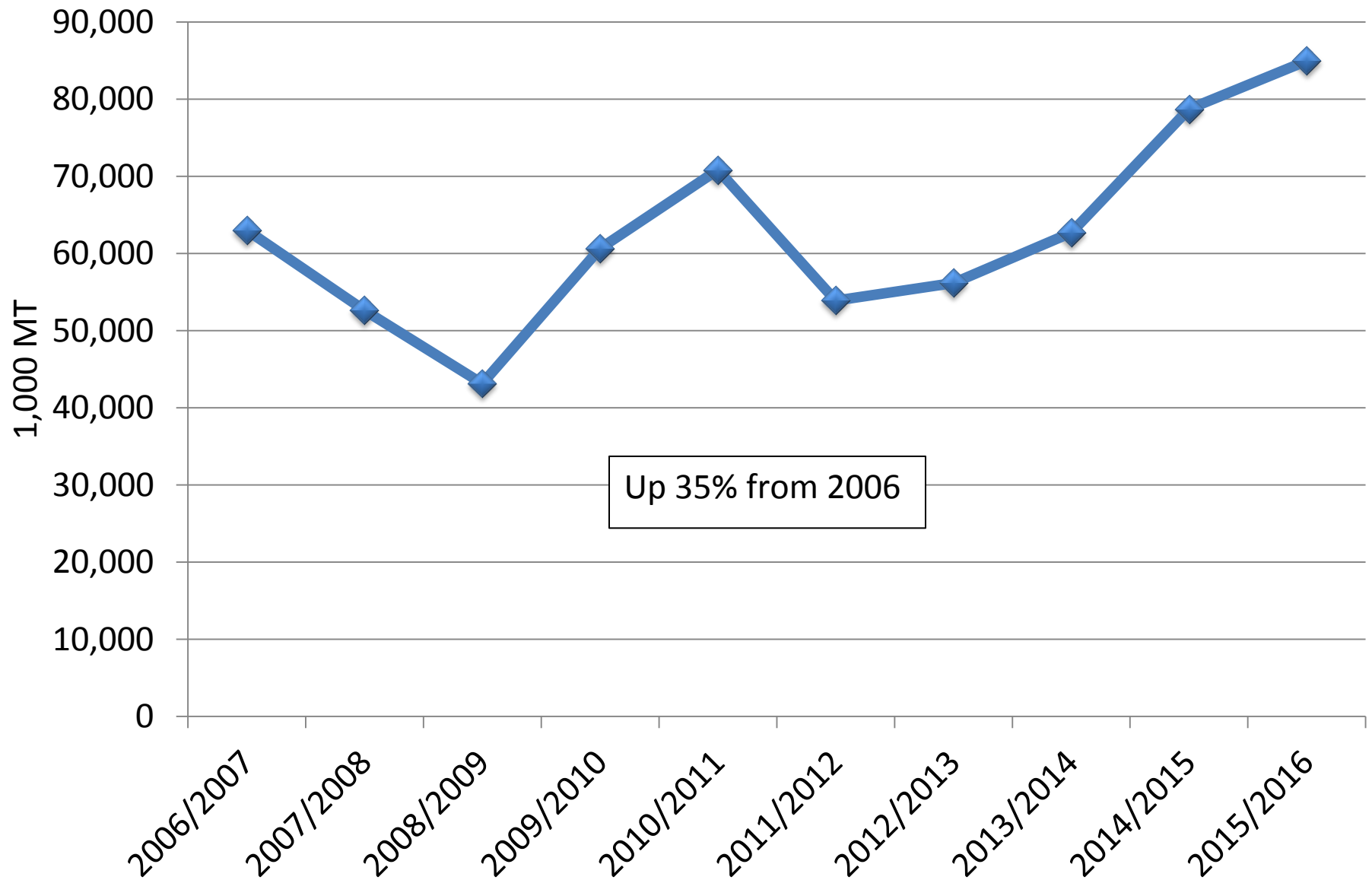
Percent of Global Soybean Production, 1977-2015



Soybean Ending Stocks by Country, 2006-2015



World Soybean Stocks, 2006-2015

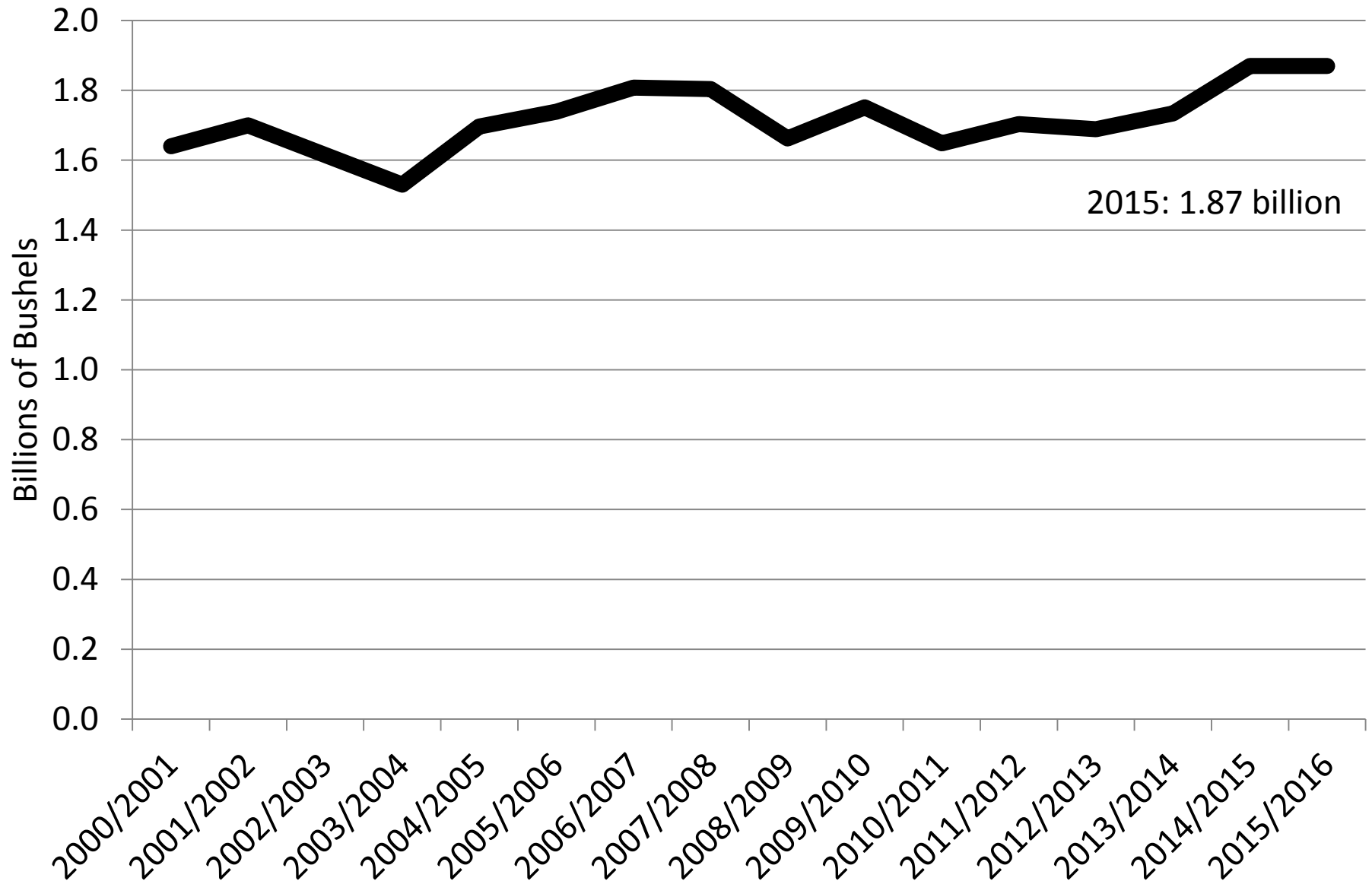


Global Supply

- 3 countries
 - Record/near record production in both North and South America the past two years
 - What are the implications of a down year?
- When will Argentina stocks enter the export market? (Sunday, October 25, 2015)
- What is Chinas stocking policy for soybeans?
- Will U.S. stocks move in 2015/16?

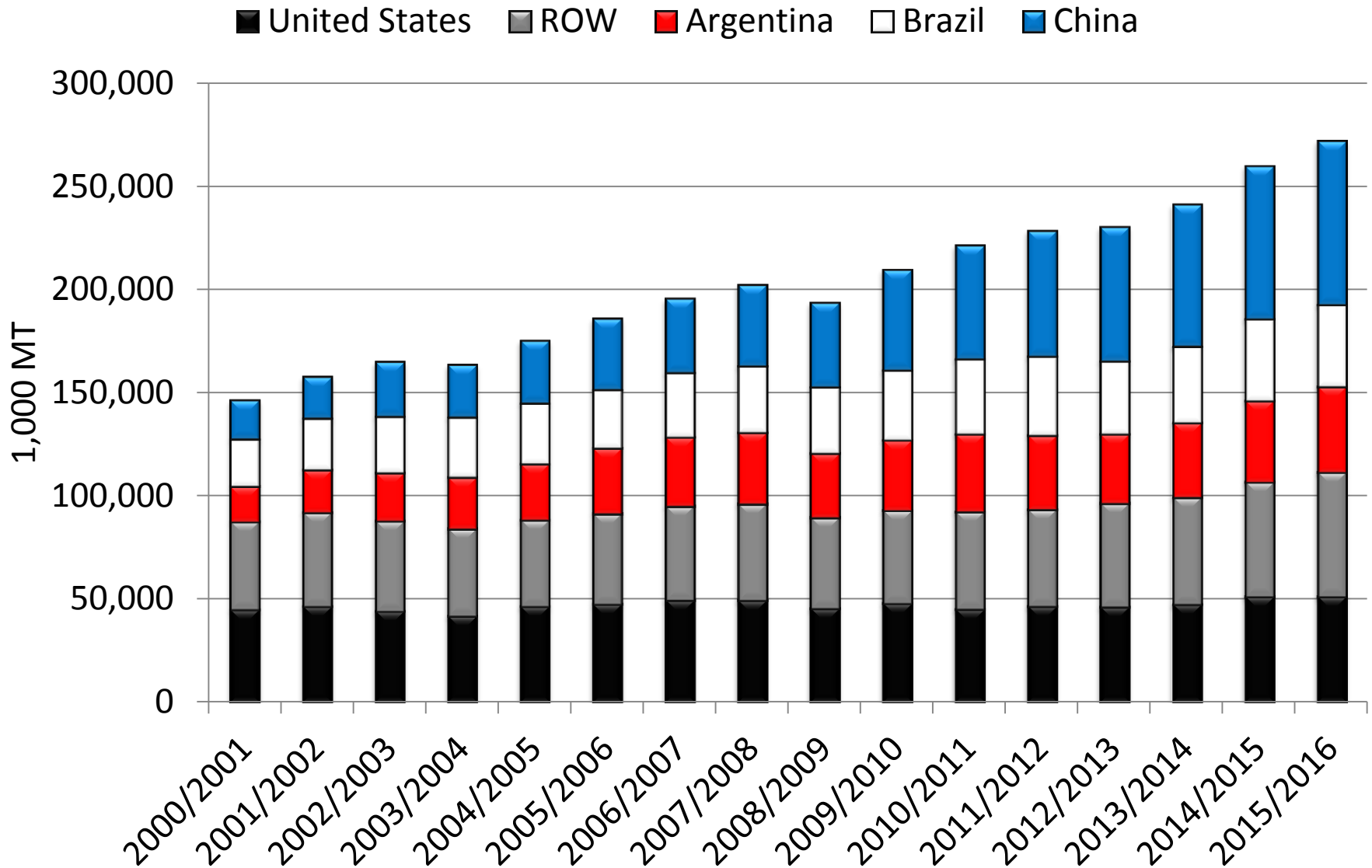
DEMAND

United States Soybean Crush, 2000-2015



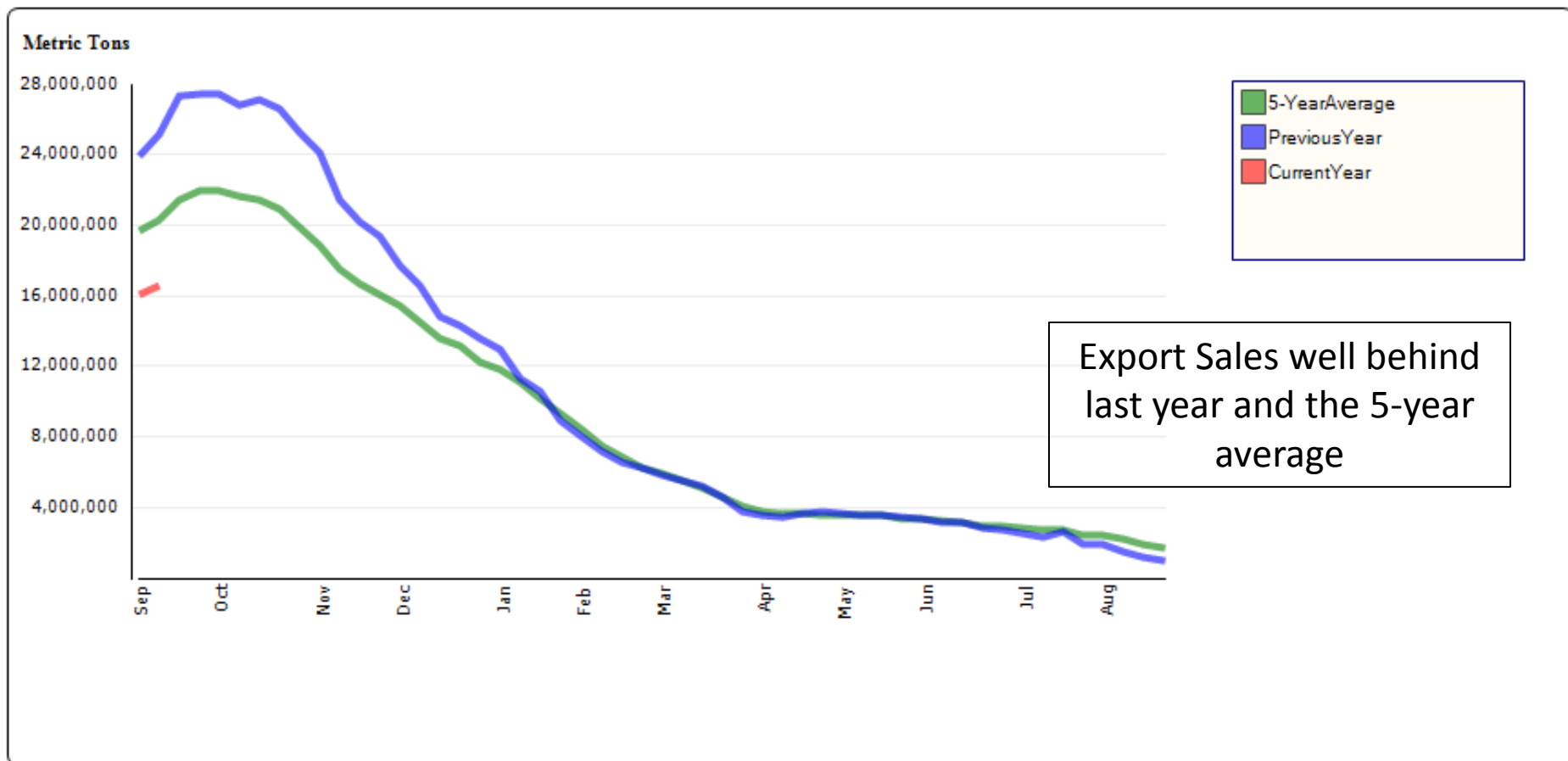
2015: 1.87 billion

World Soybean Crush, 2000-2015



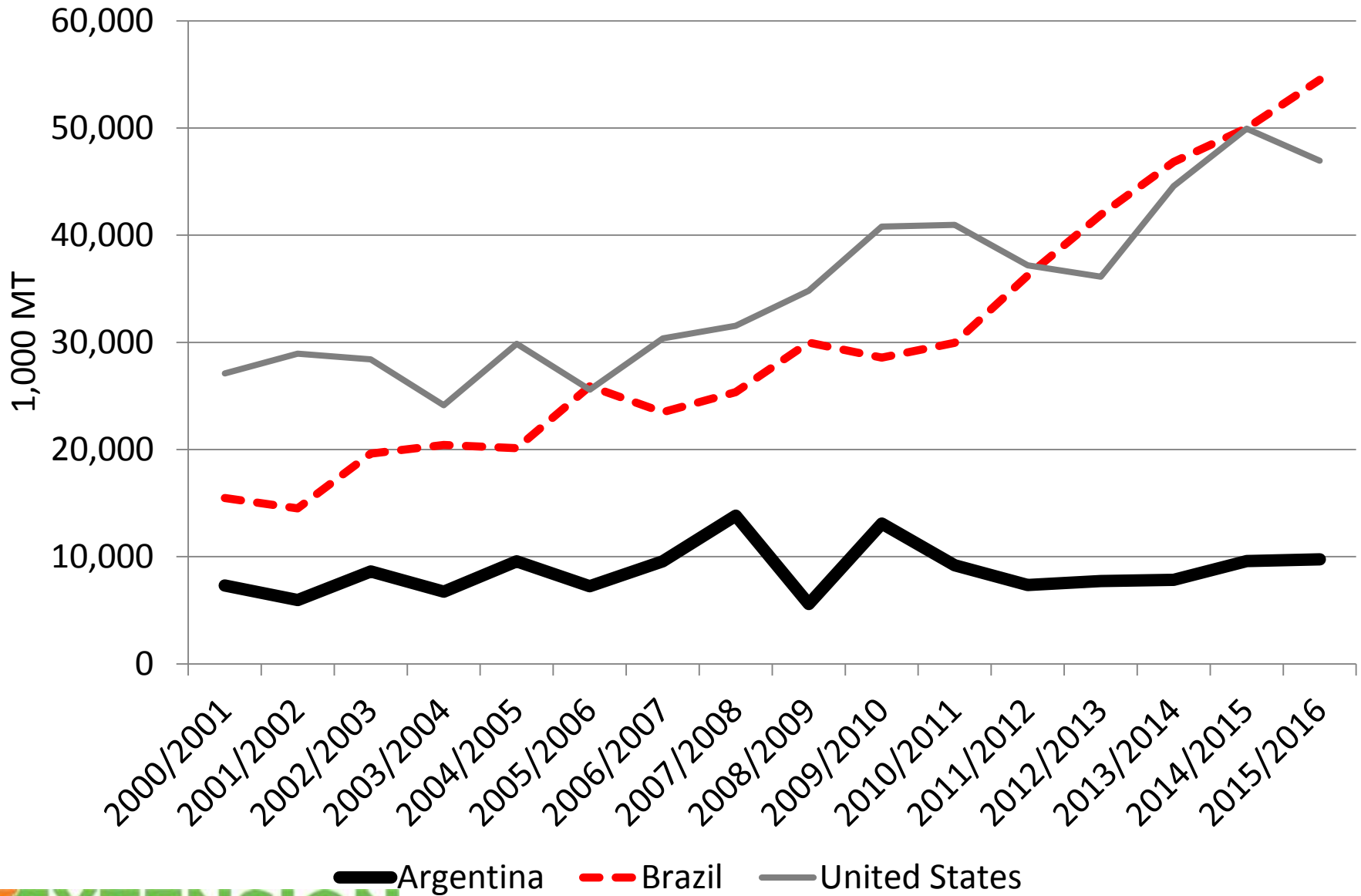
Outstanding Sales - World Total Soybeans

Selected Year: 2015-2016 as of 09/10/2015

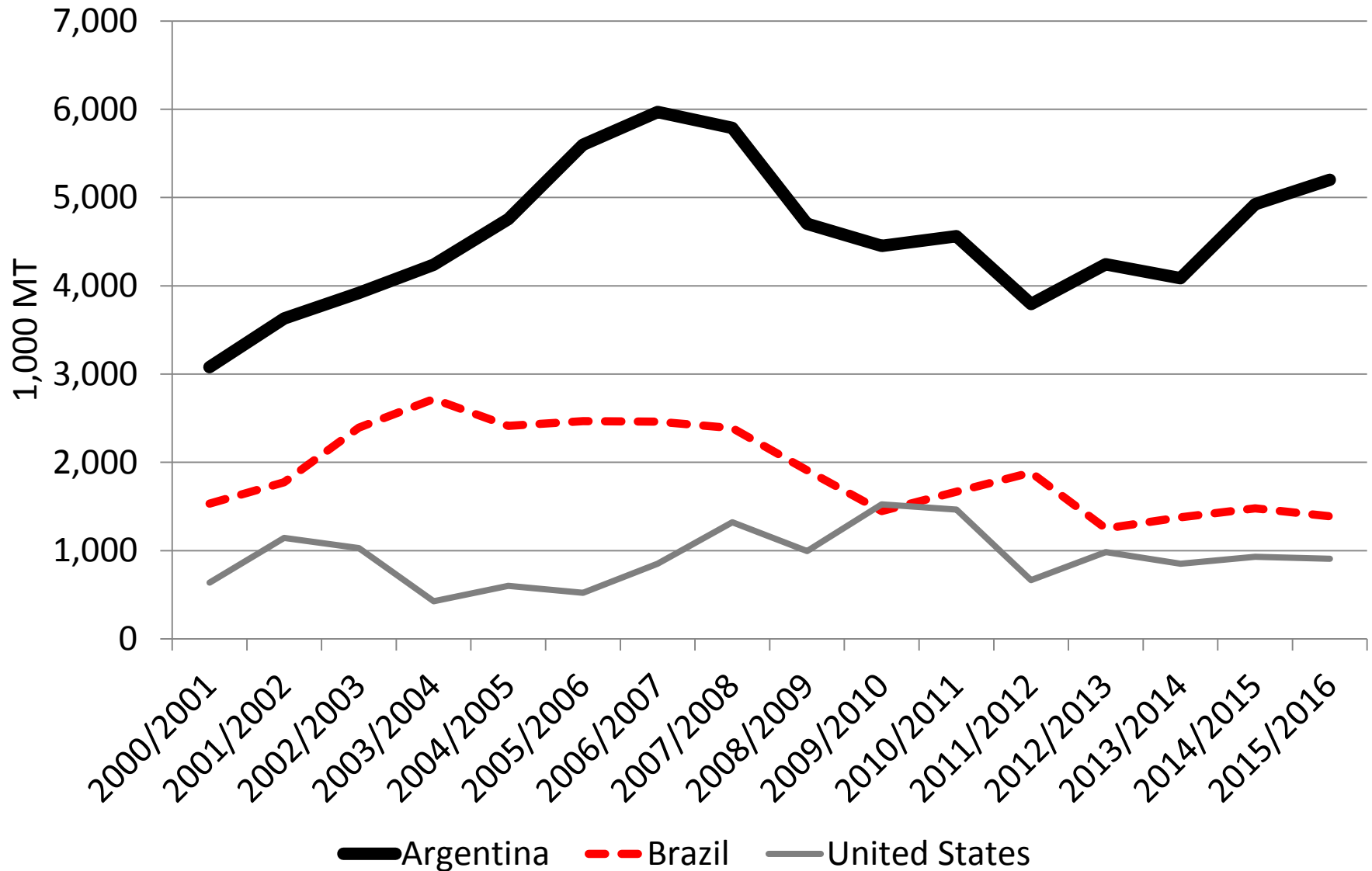


9/22/2015 Source: USDA/FAS/Export Sales Reporting

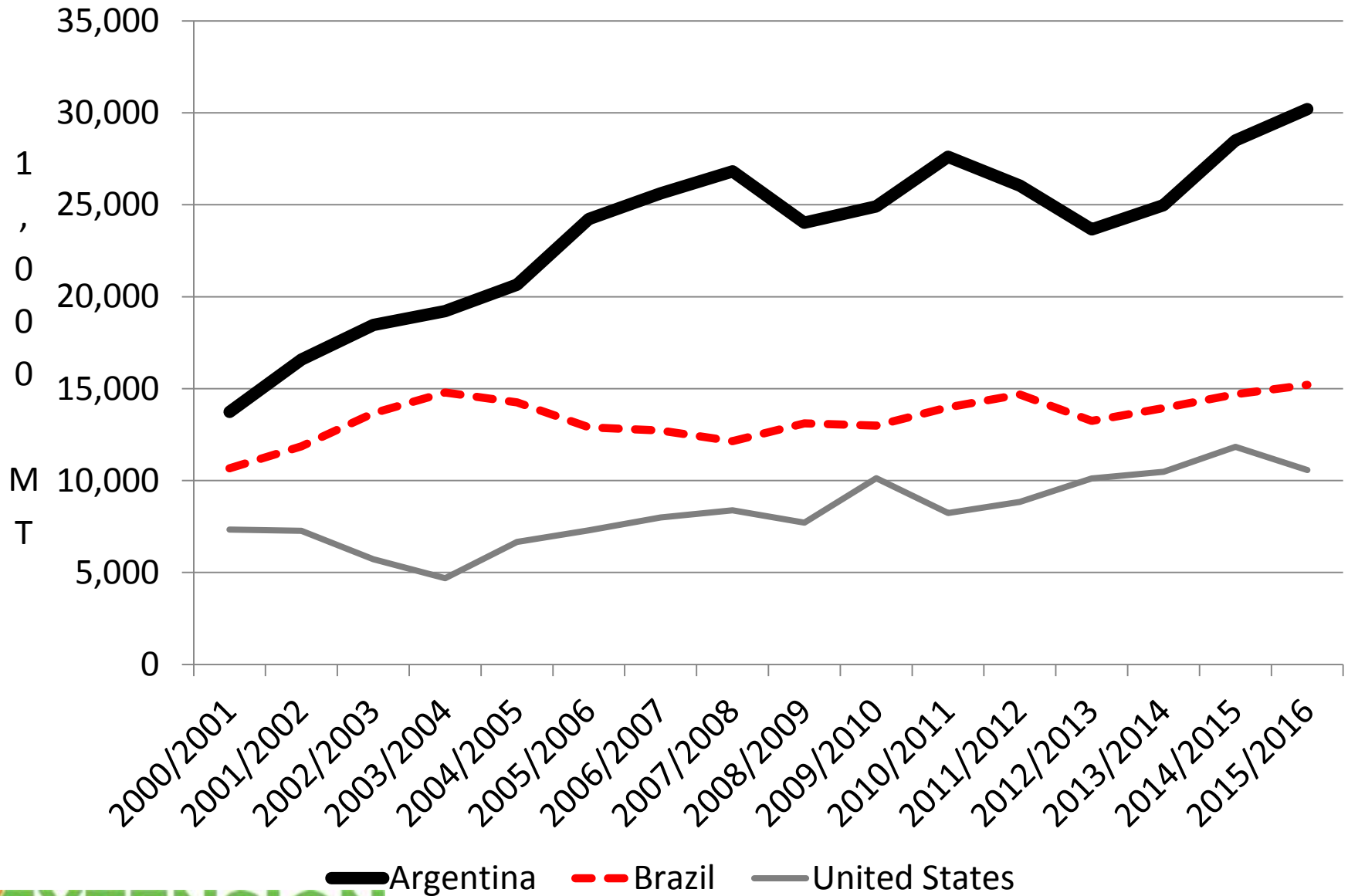
Soybean Exports, 2000-2015



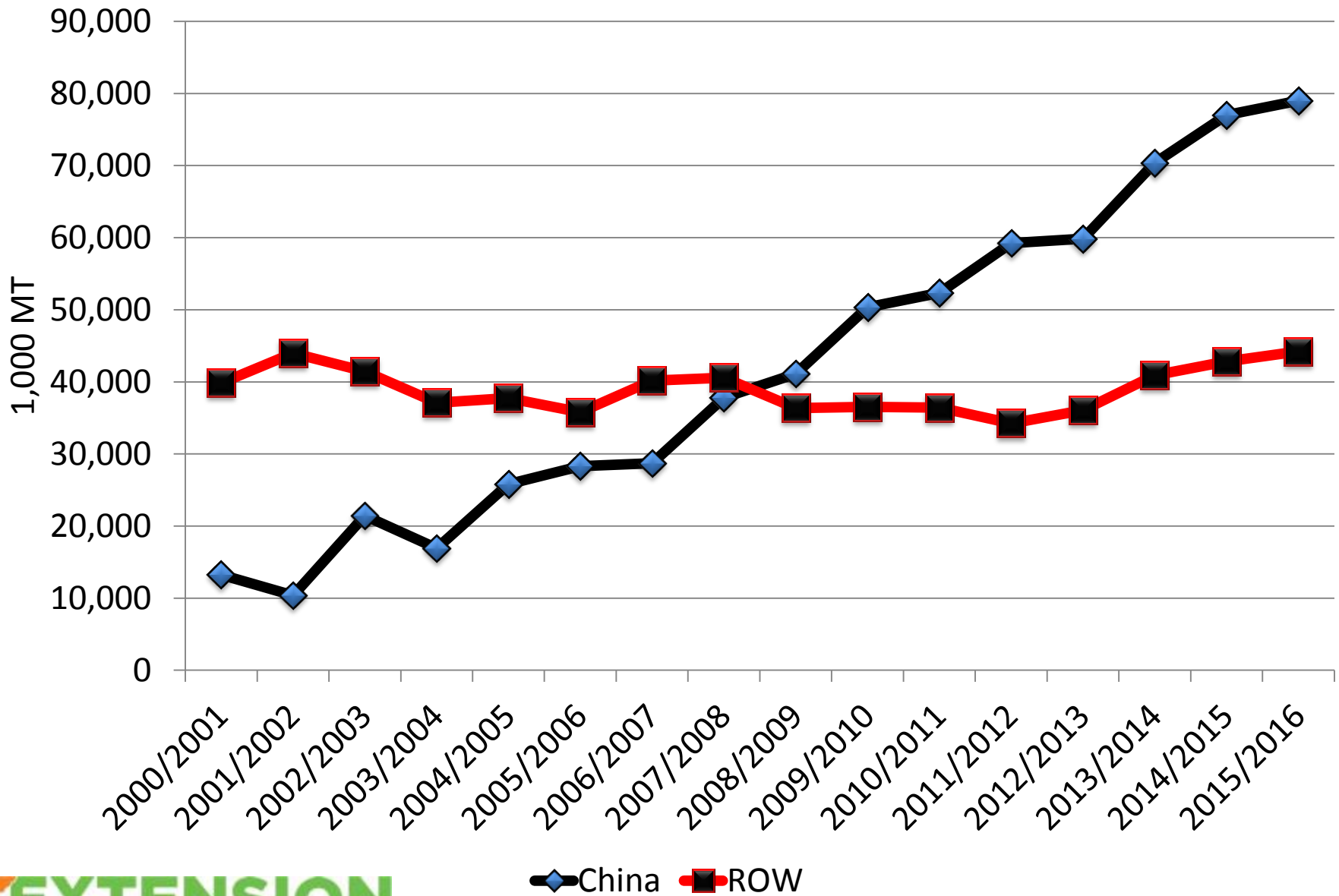
Soybean Oil Exports, 2000-2015



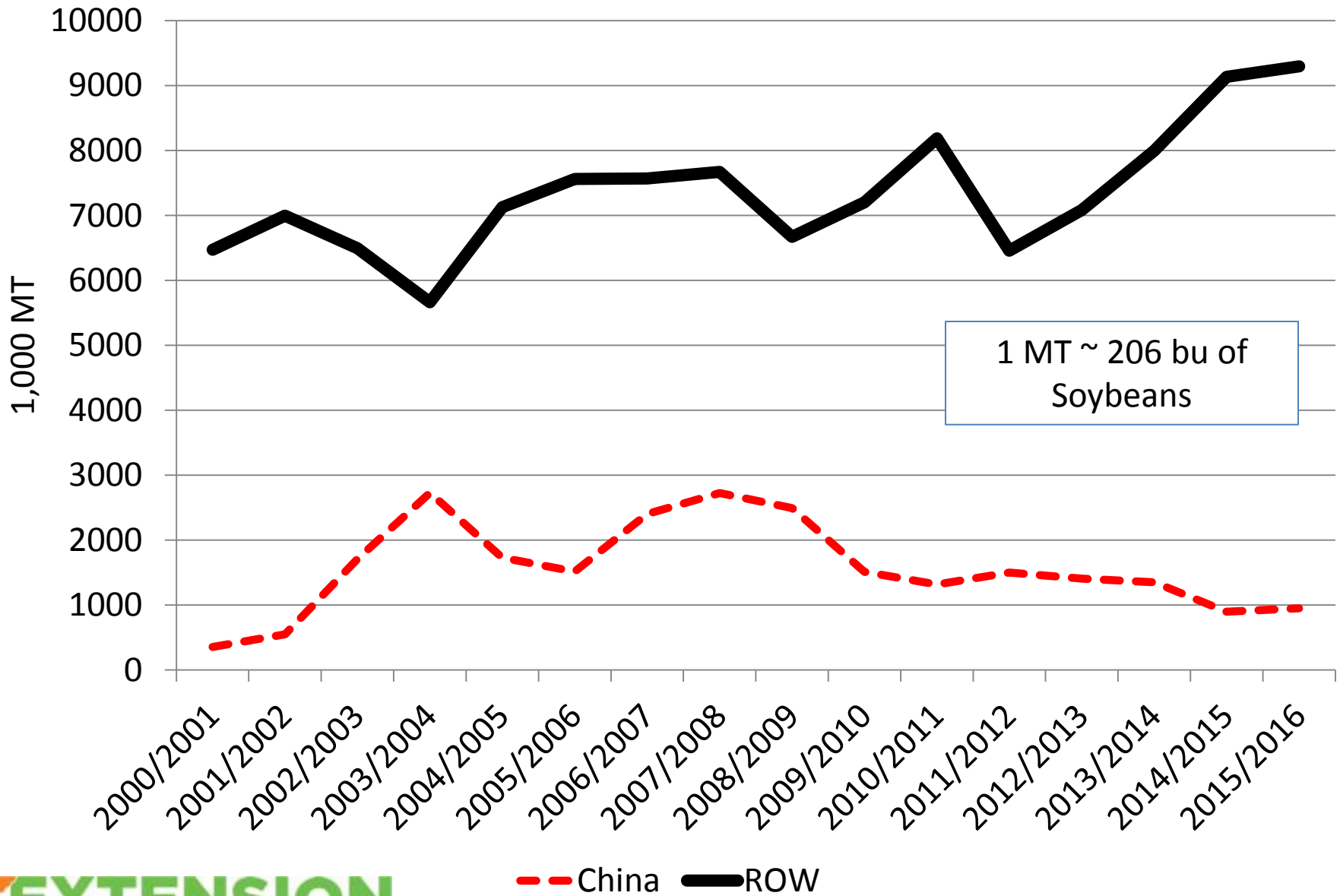
Soybean Meal Exports, 2010-2015



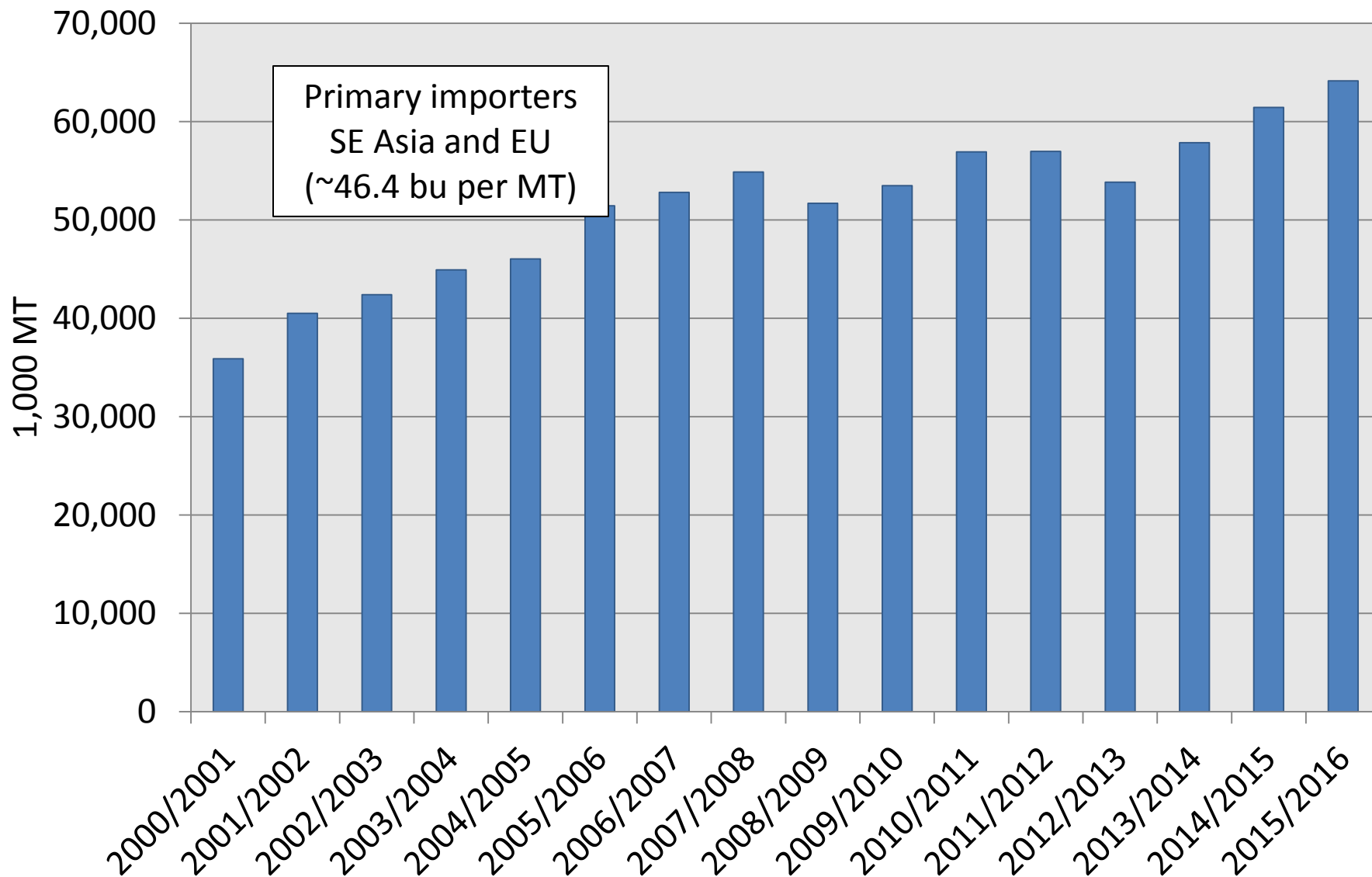
Soybean Imports, 2000-2015



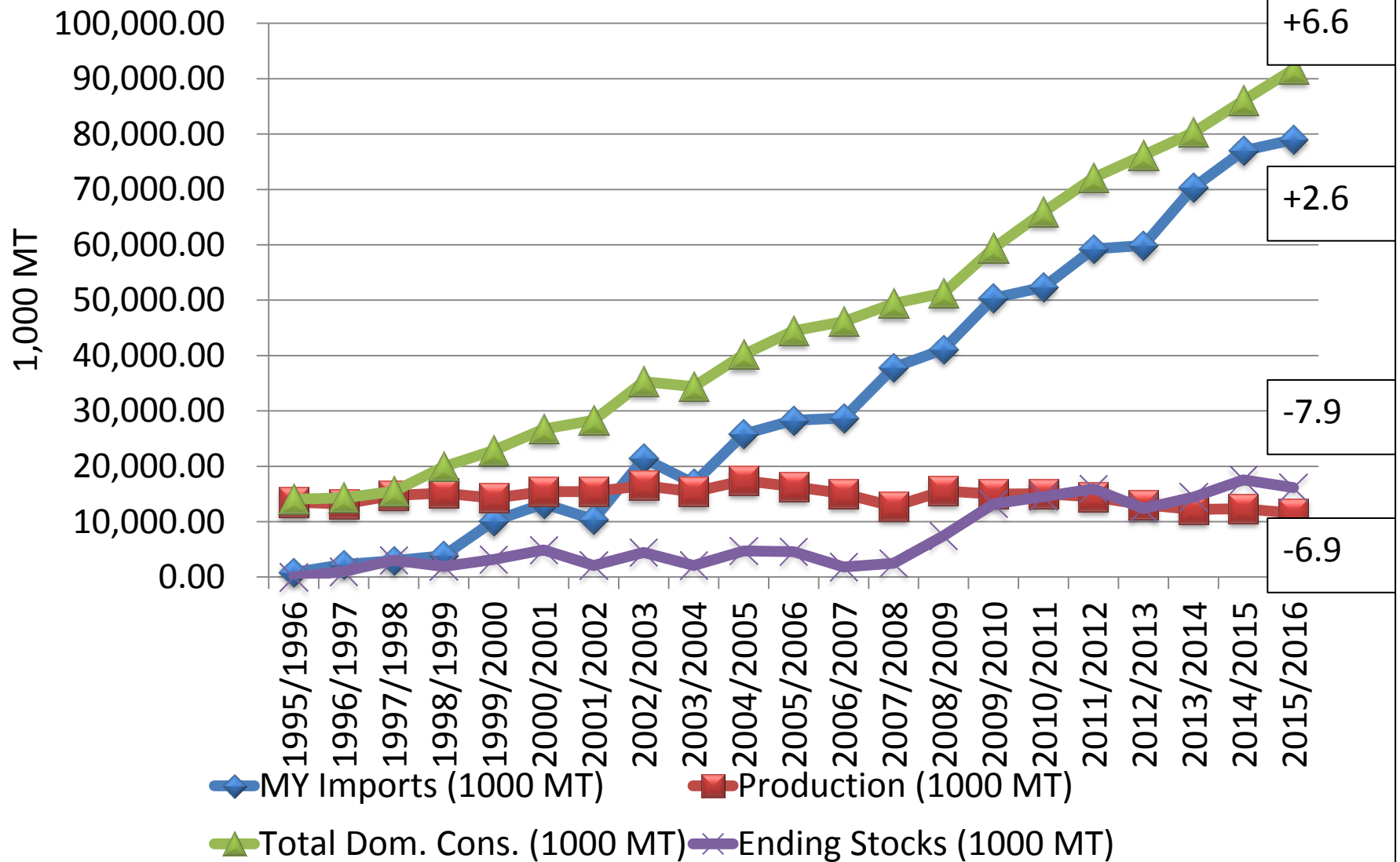
Soybean Oil Imports, 2010-2015



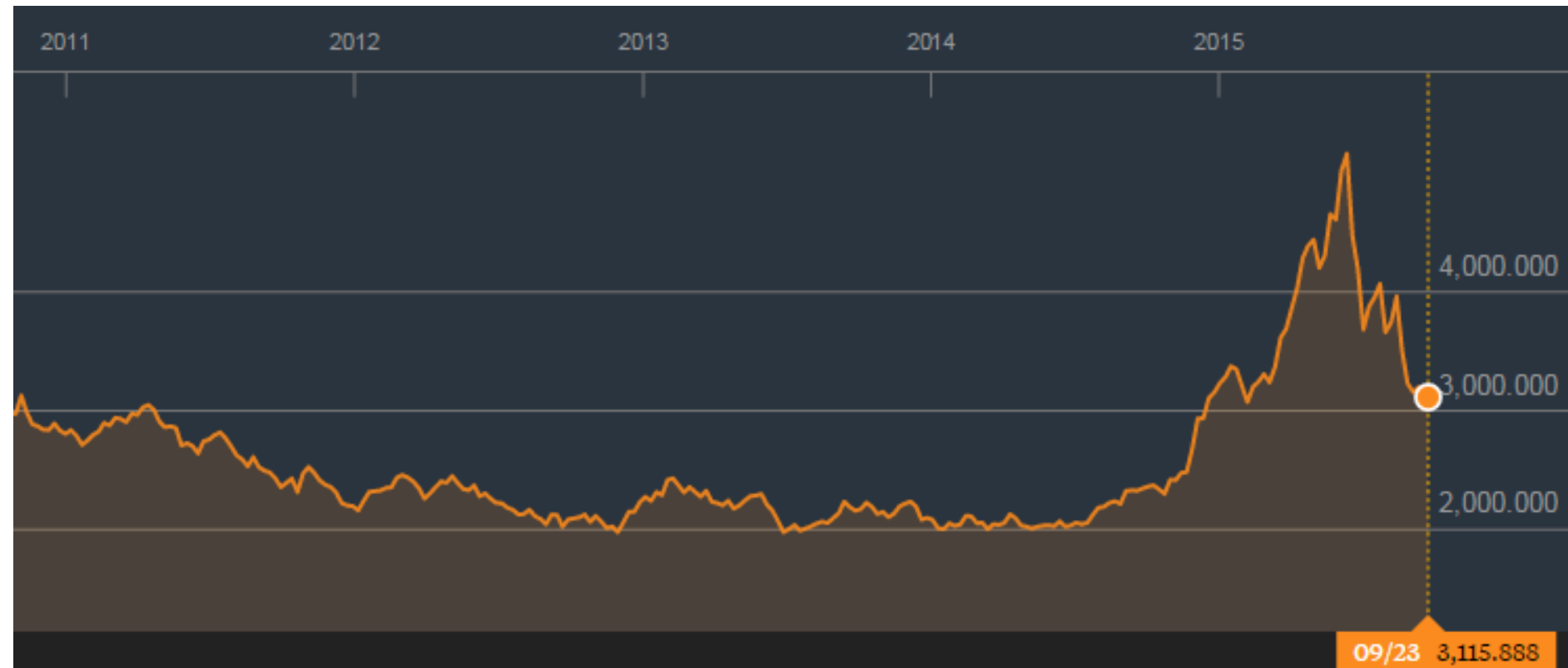
Global Soybean Meal Imports, 2000-2015



Chinese Soybean Supply and Utilization, 1995-2015



Shanghai Stock Exchange Composite Index

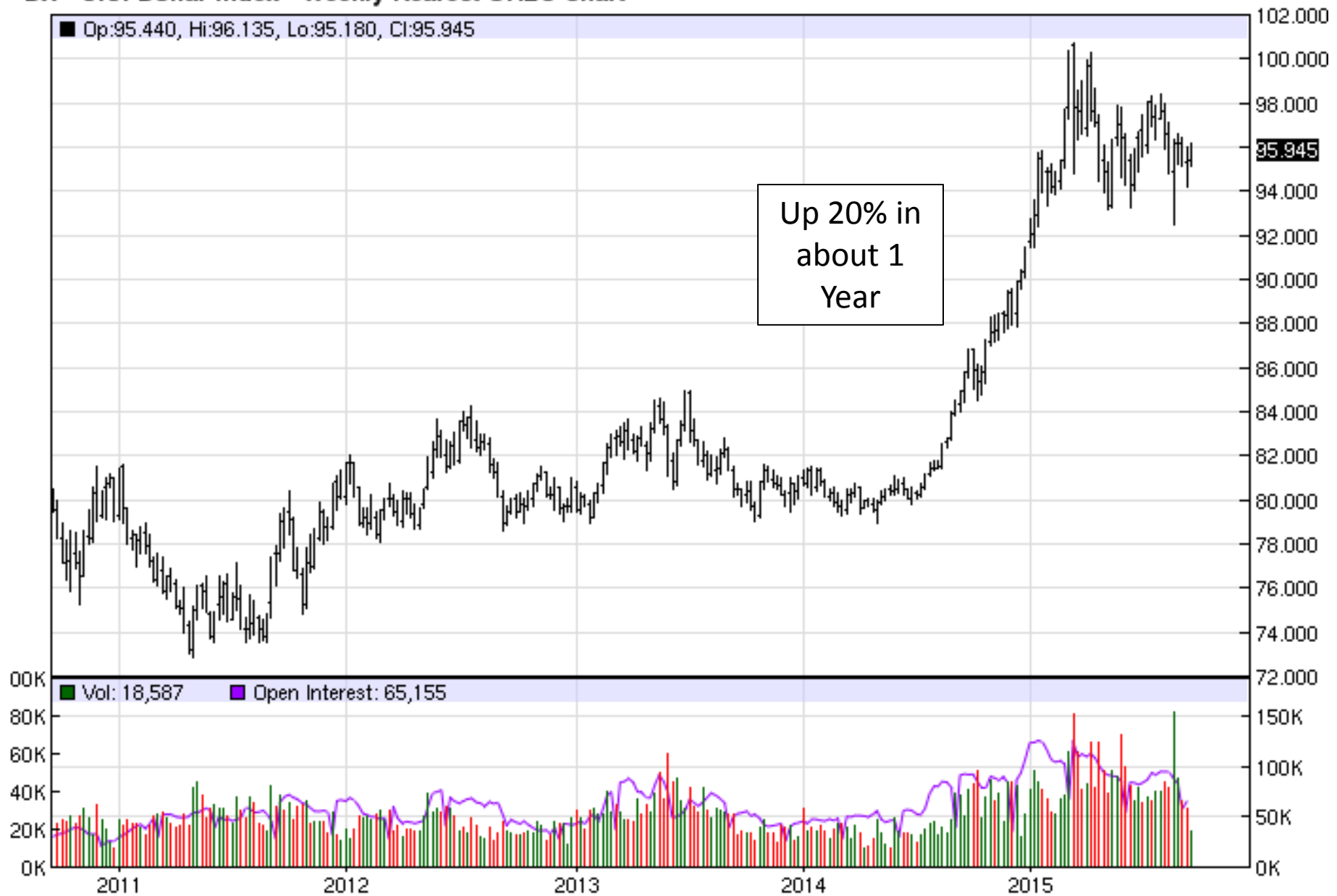


Demand

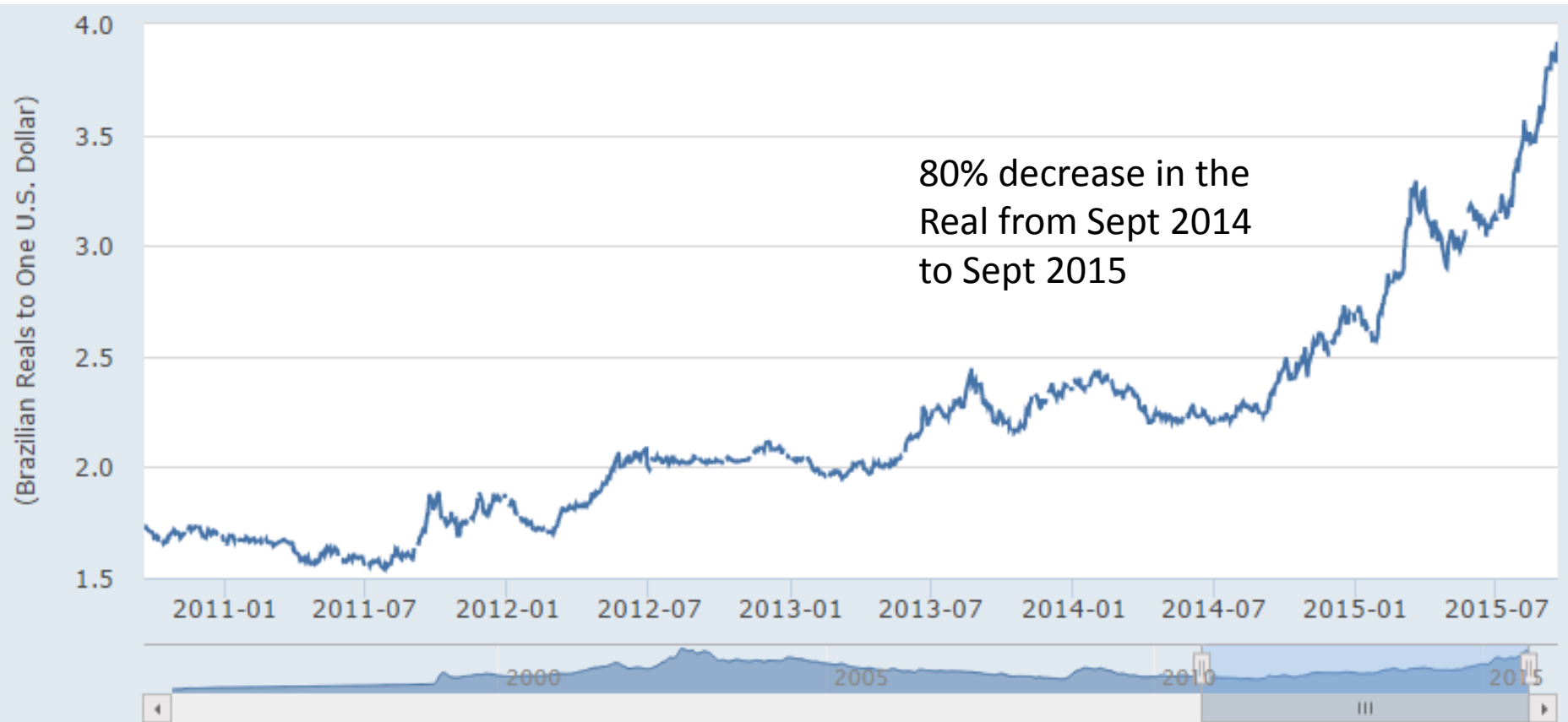
- Domestic demand and global demand remain very strong
- China drives the global export market
 - Chinese economic concerns
 - 3 suppliers chasing one buyer
 - Given the global supply China can be a selective purchaser
 - More domestic acres in China could moderately reduce import demand
 - Reduction in Chinese hog inventory

EXCHANGE RATES

DX - U.S. Dollar Index - Weekly Nearest OHLC Chart



Brazilian Real per USD



Source: Board of Governors of the Federal Reserve System (US)

Shaded areas indicate US recessions - 2015 research.stlouisfed.org

Chinese Yuan per USD



Source: Board of Governors of the Federal Reserve System (US)

Argentine Peso Per USD



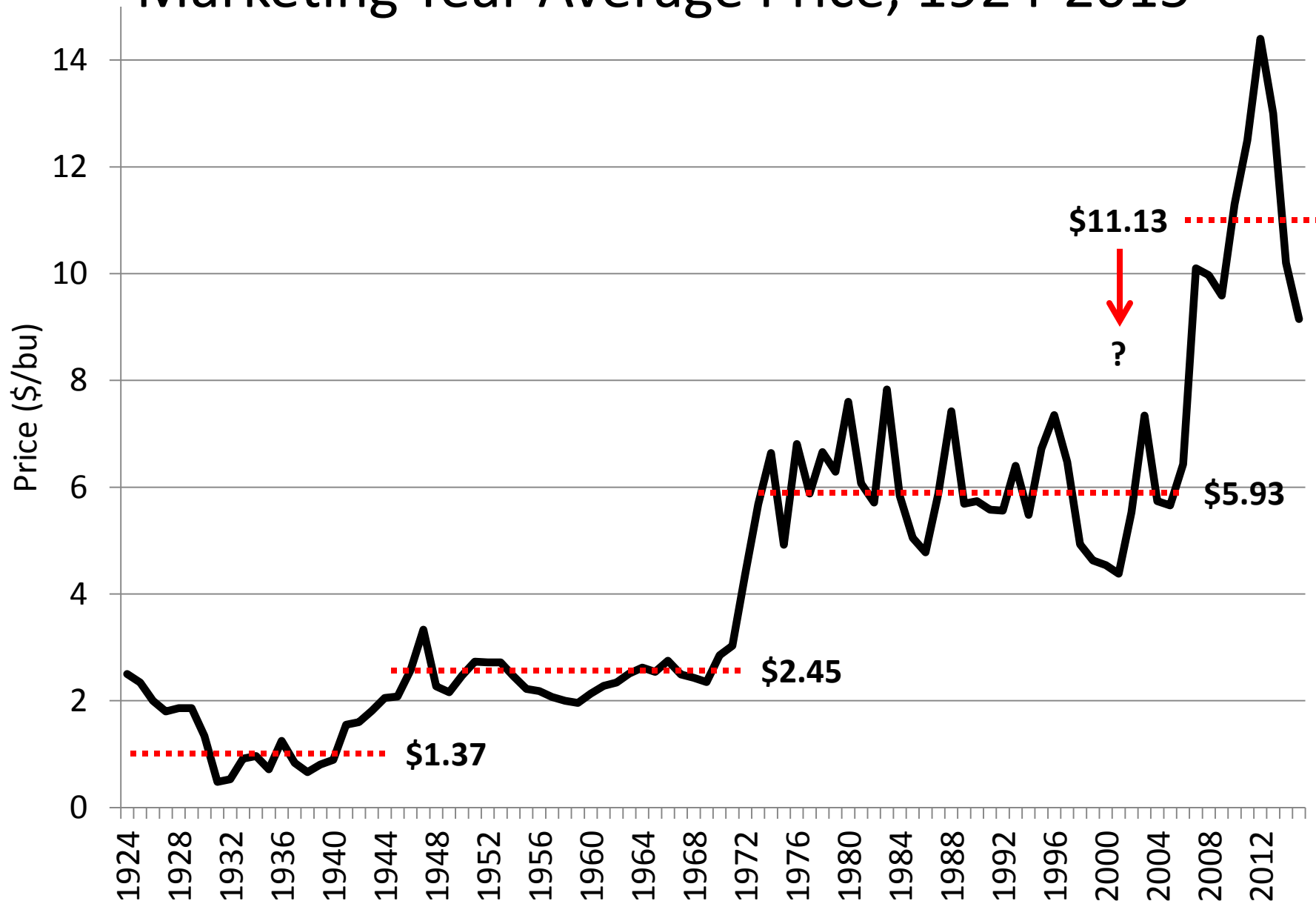
Exchange Rates

- Significant headwinds for US exports
- Unlikely to improve in the foreseeable future

SUMMARY AND PRICES

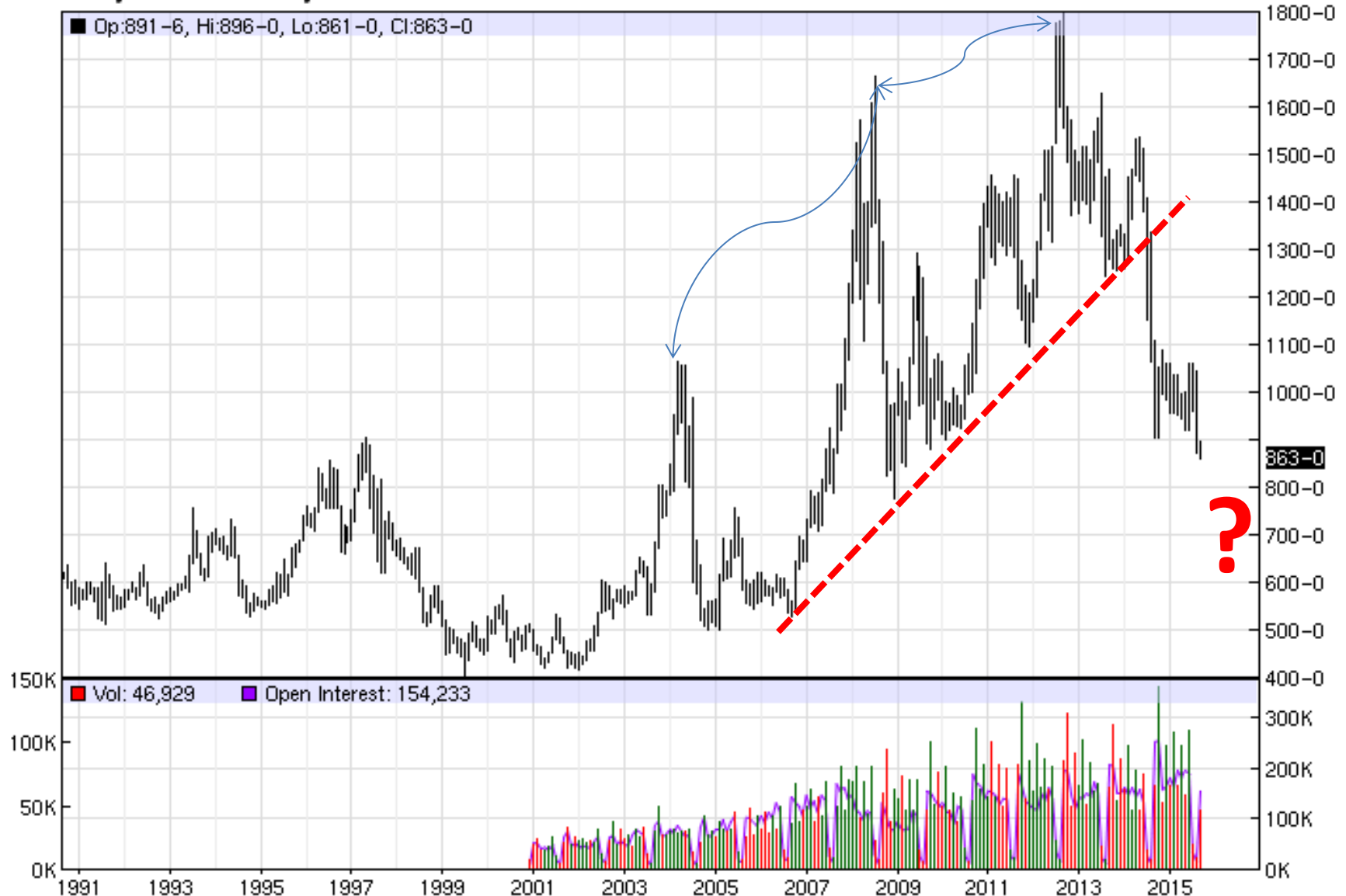
	2013/14	2014/15	2015/16 USDA Projected September	Change From Previous Year
Acreage				
Acres Planted (Million Acres)	76.8	83.7	84.3	0.6
Acres Harvested (Million Acres)	76.3	83.1	83.5	0.4
U.S. Average Yield (Bu/Acre)	44.0	47.8	47.1	-0.7
Supply (Million Bushels)				
Beg. Stocks	141	92	210	118
Production	3,358	3,969	3,935	-34
Imports	72	33	30	-3
Total Supply	3,570	4,094	4,175	81
Use (Million Bushels)				
Crushing	1,734	1,870	1,870	0
Exports	1,638	1,825	1,725	-100
Seed and Residual	106	179	130	-49
Total Use	3,478	3,884	3,725	-159
U.S. Ending Stocks	92	210	450	240
Foreign Stocks	2,212	2,683	2,672	-11
Price and Stocks to Use Ratio				
U.S. Average Season Price (\$/Bu)	\$13.00	\$10.06	\$8.40-\$9.90	-\$0.91
U.S. Stocks/Use	2.65%	5.41%	12.08%	6.67%

Marketing Year Average Price, 1924-2015

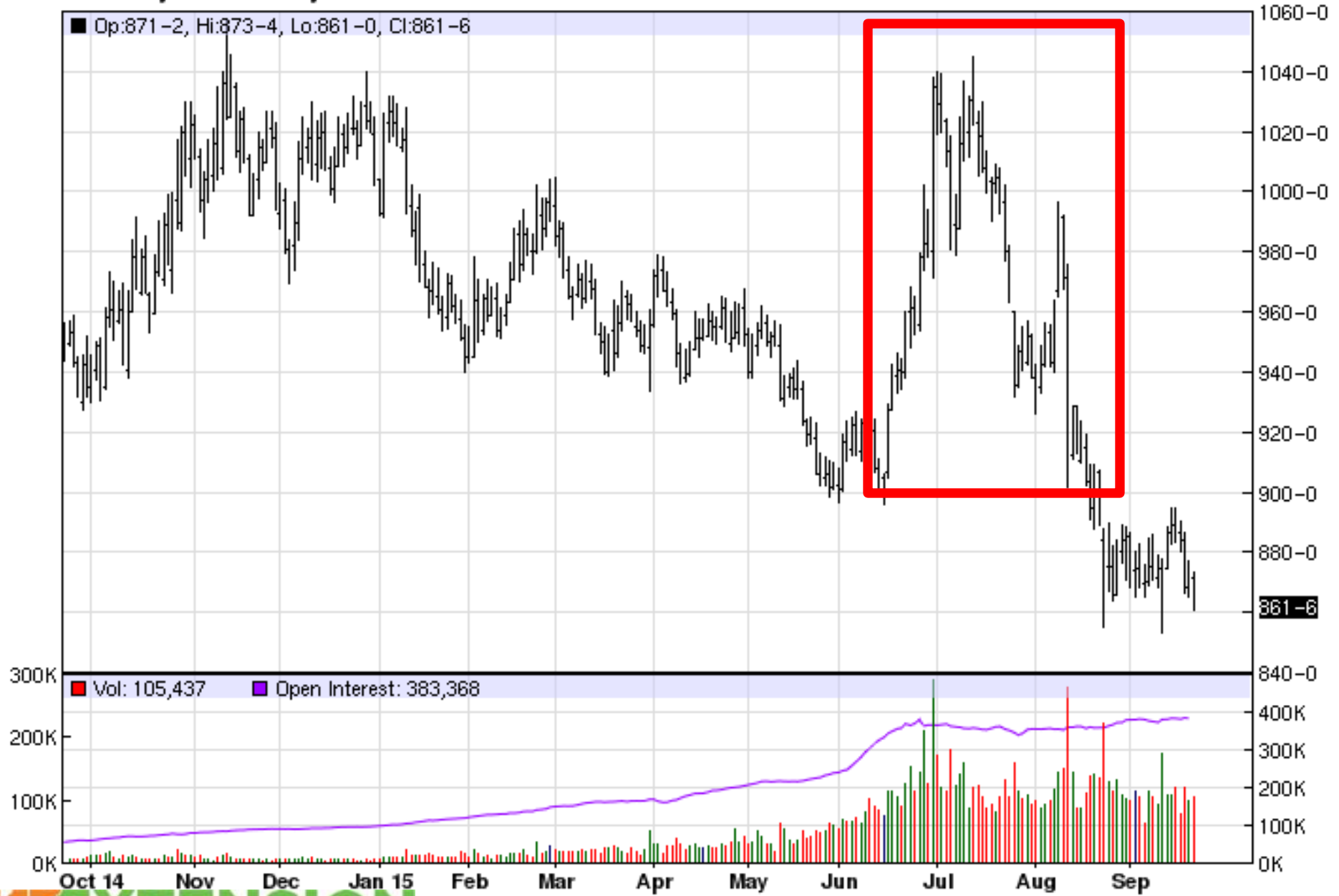


Continuous Monthly Soybean Futures

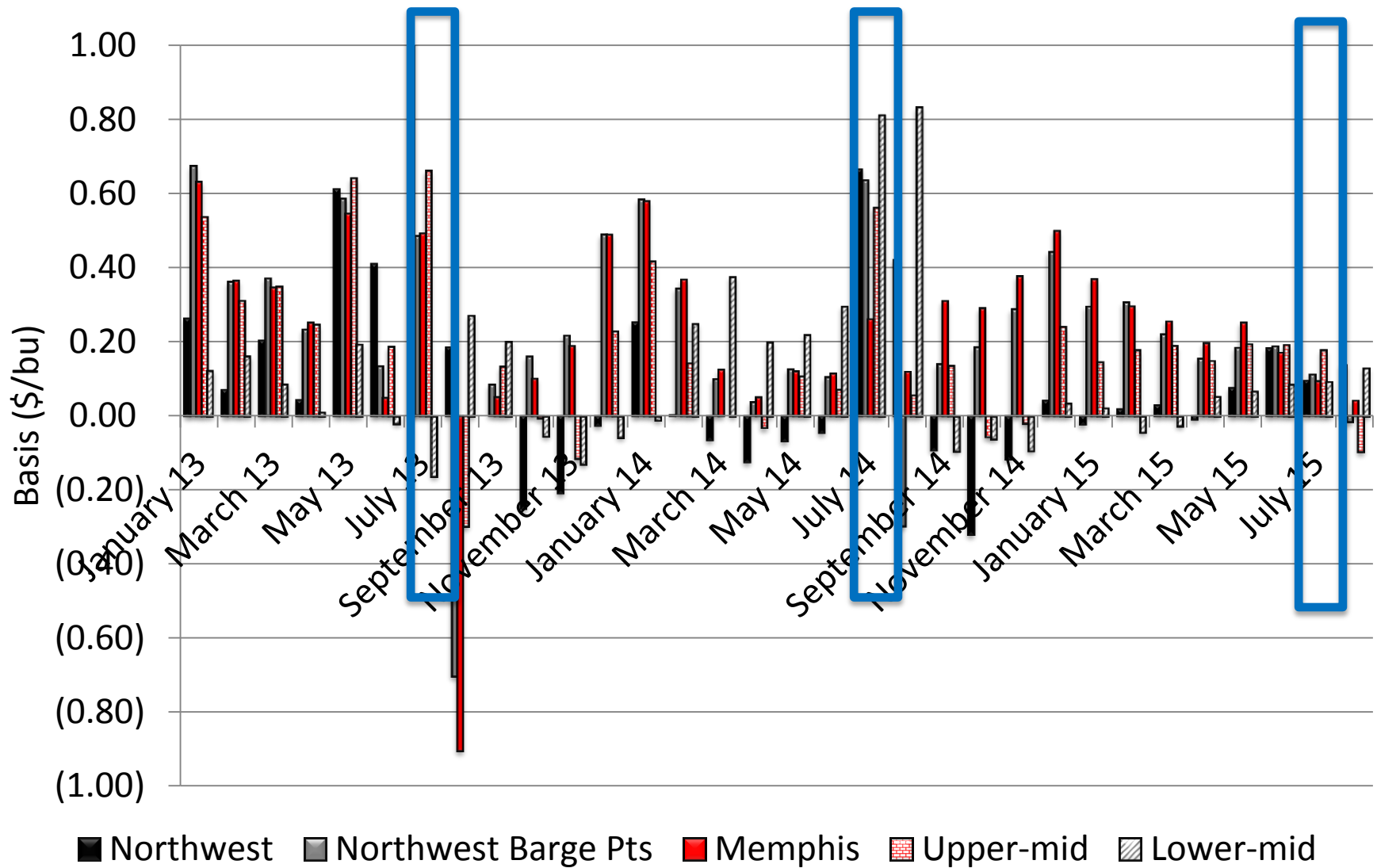
ZS - Soybeans - Monthly Nearest OHLC Chart



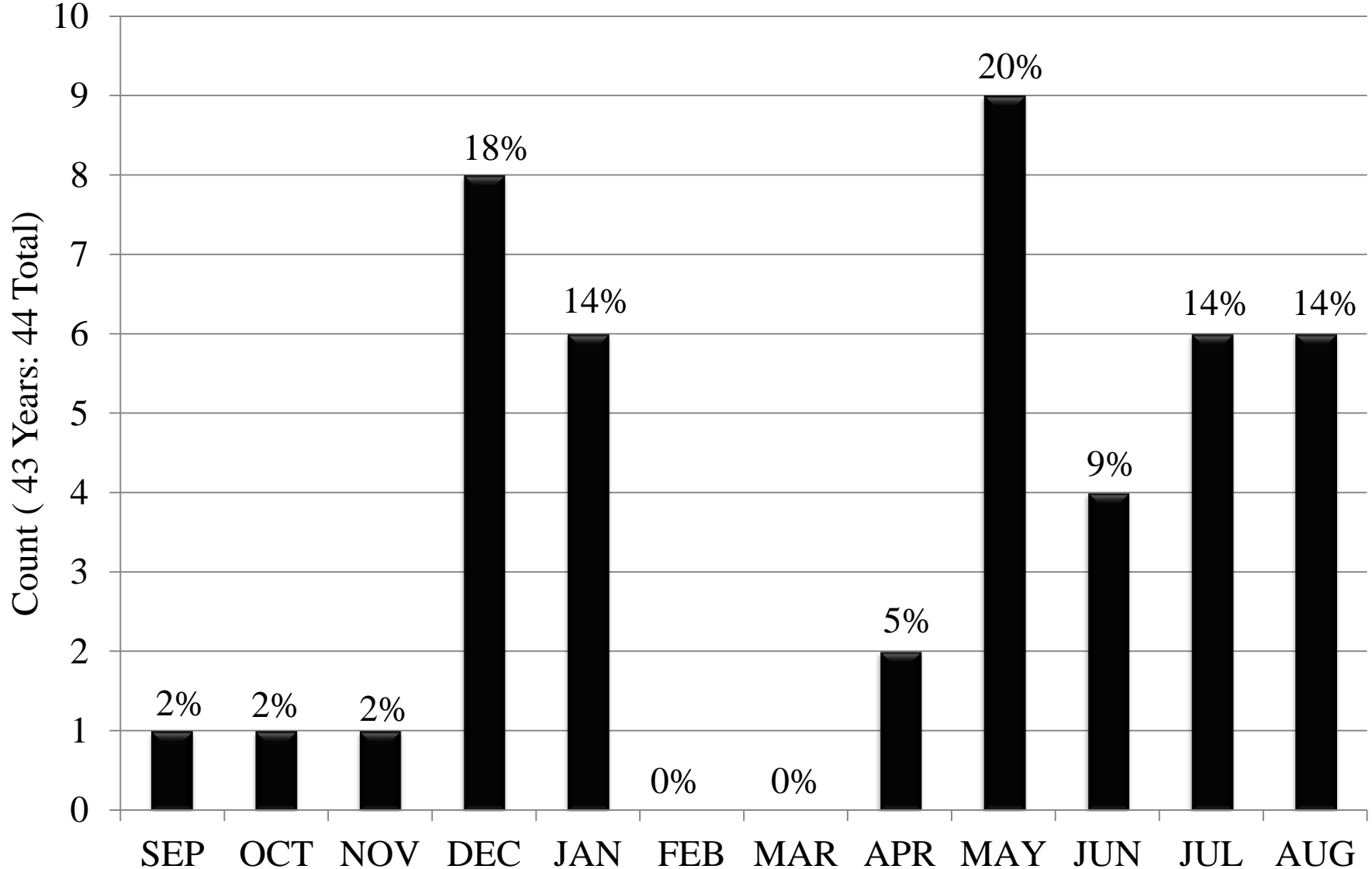
ZSX15 - Soybeans - Daily OHLC Chart



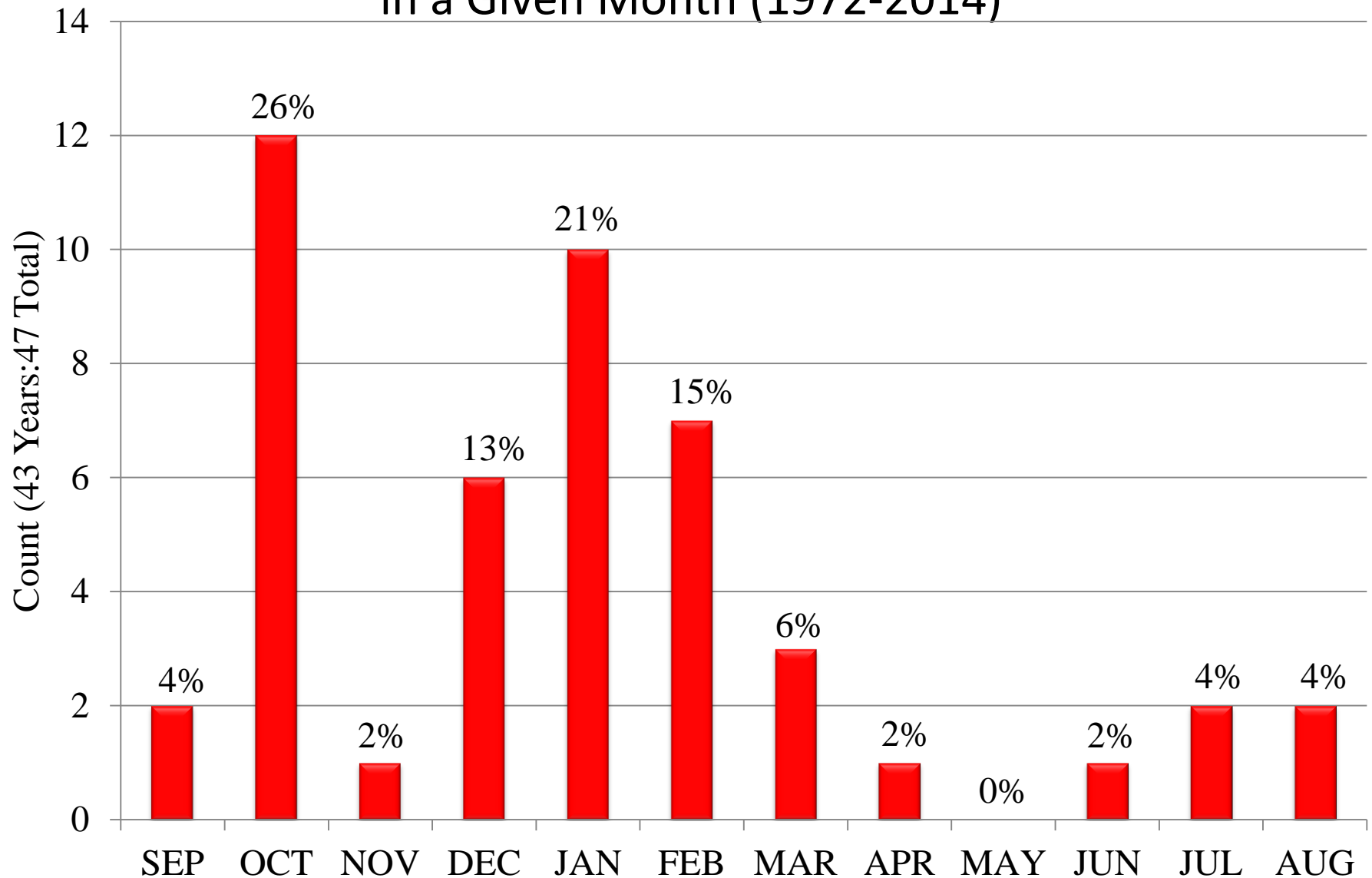
Soybean Basis for 5-Regions in Tennessee, 2013-15



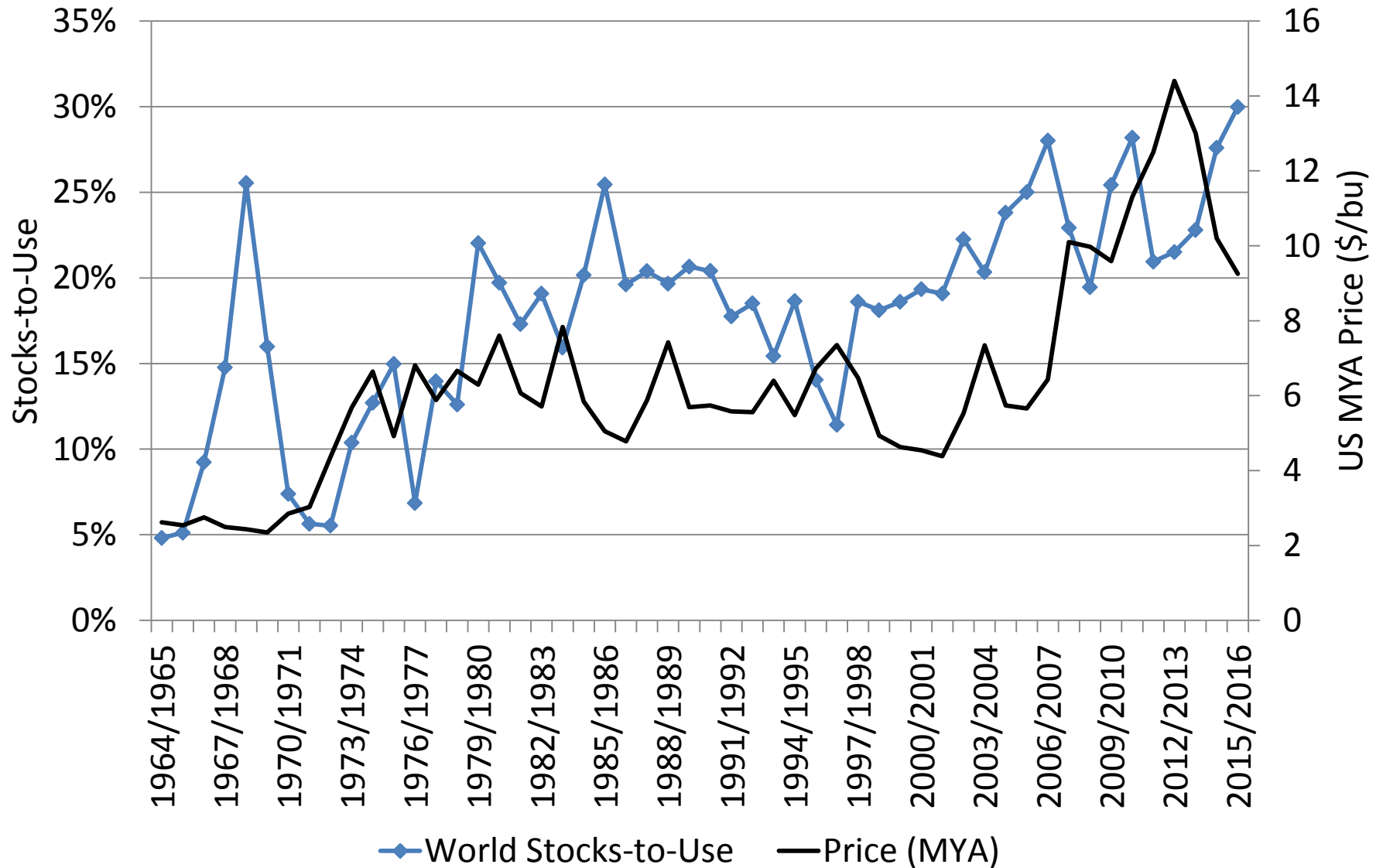
Number of Times the Marketing Year High Price has Occurred in a Given Month (1972-2014)



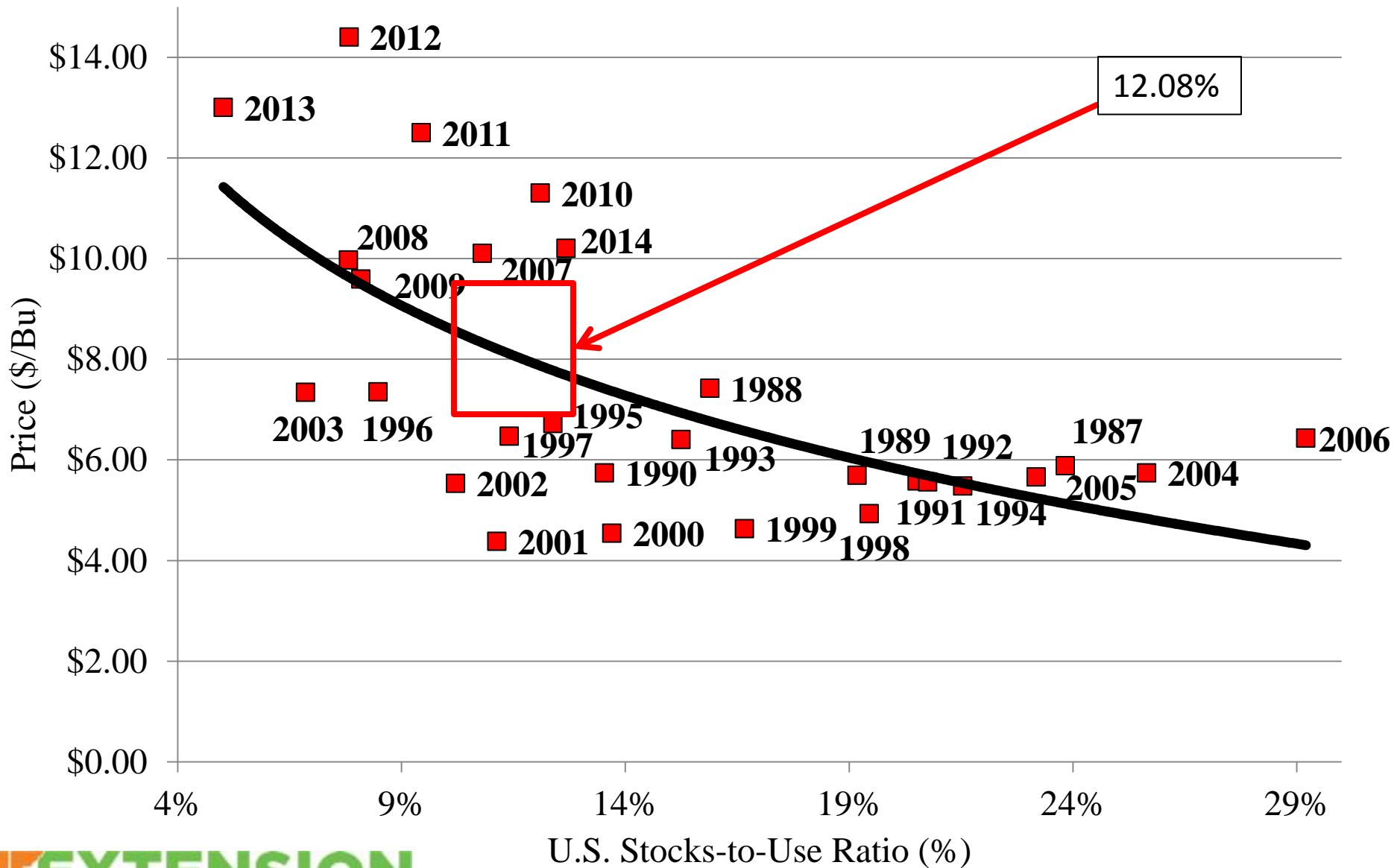
Number of Times the Marketing Year Low Price has Occurred in a Given Month (1972-2014)



World Stocks to Use and US Marketing Year Price



US Stocks-to-Use Ratio and Price Relationship, 1987-2014



Summary

- Prices are likely to continue to slide lower in 2016 unless a production disruption occurs in South America
- Chinese demand will likely remain strong however South America will likely be the preferred source due to price advantage
- Exchange rates will remain a significant export hurdle

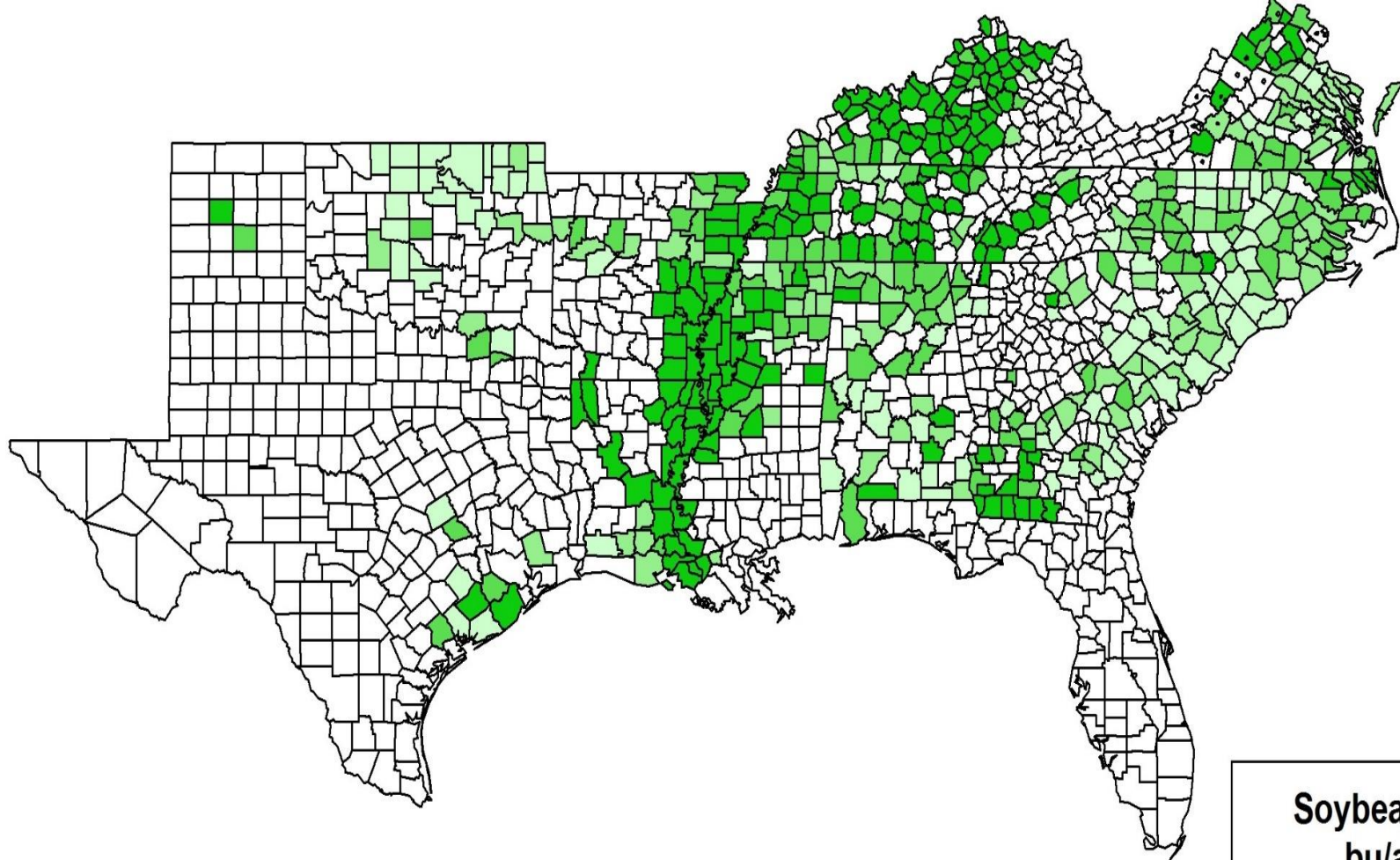
QUESTIONS

Aaron Smith, PhD

Department of Agricultural and Resource Economics

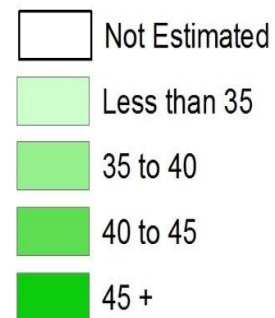
University of Tennessee Extension

2014 YIELDS

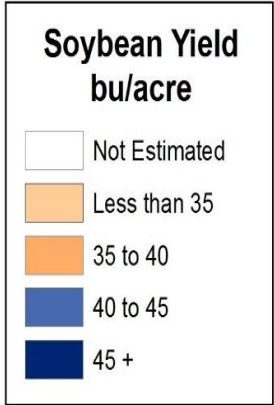
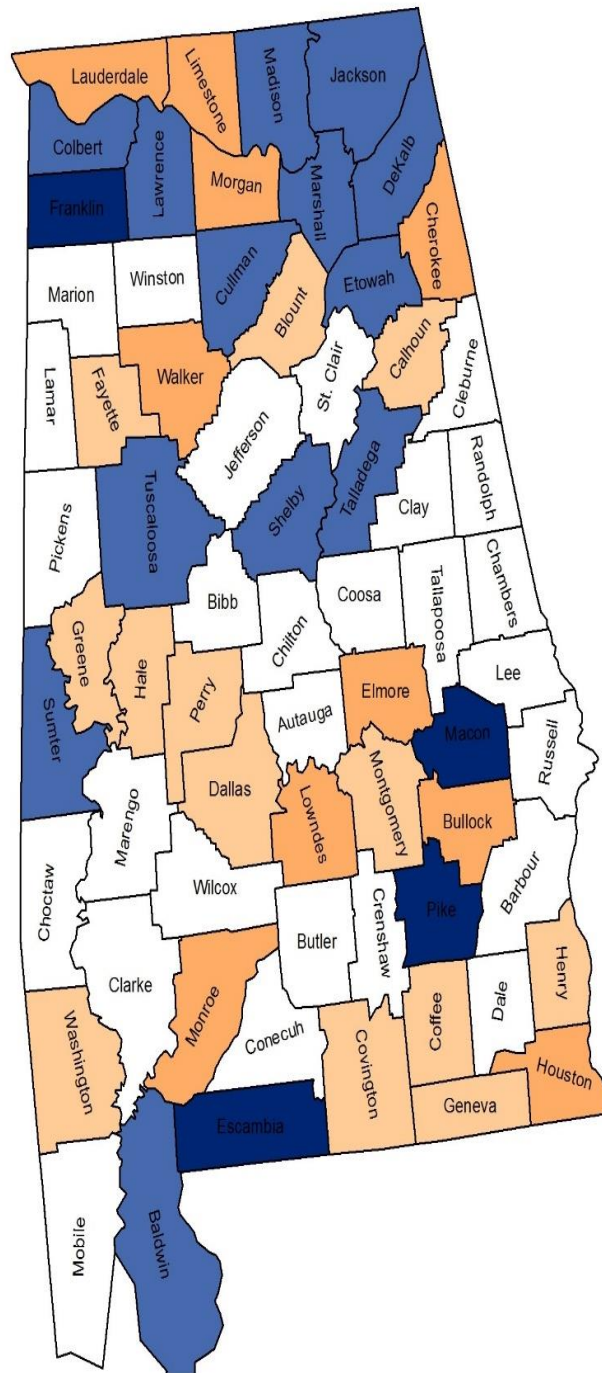


Soybeans 2014
Yield Per Harvested Acre by County
for Selected States

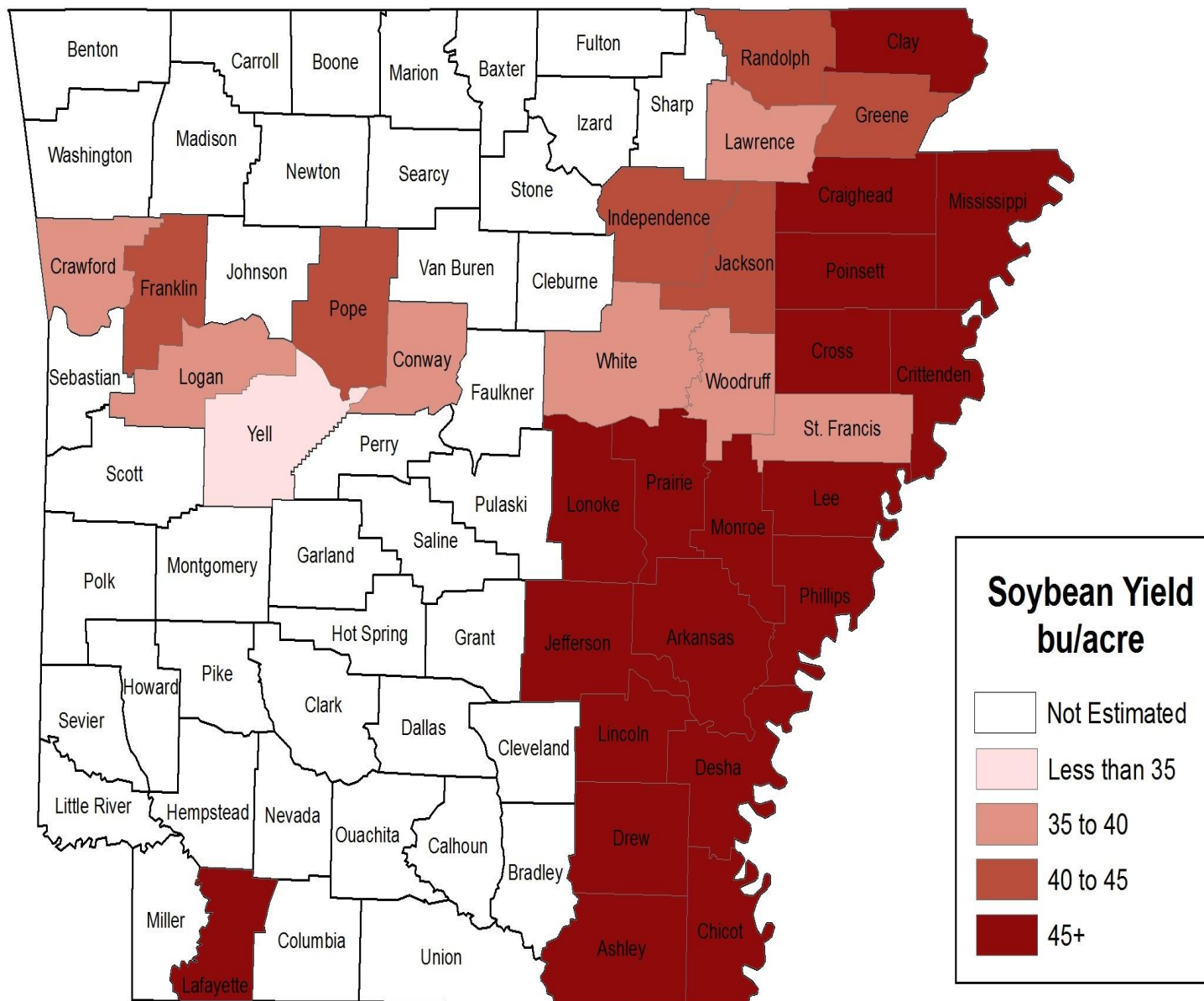
**Soybean Yield
bu/acre**



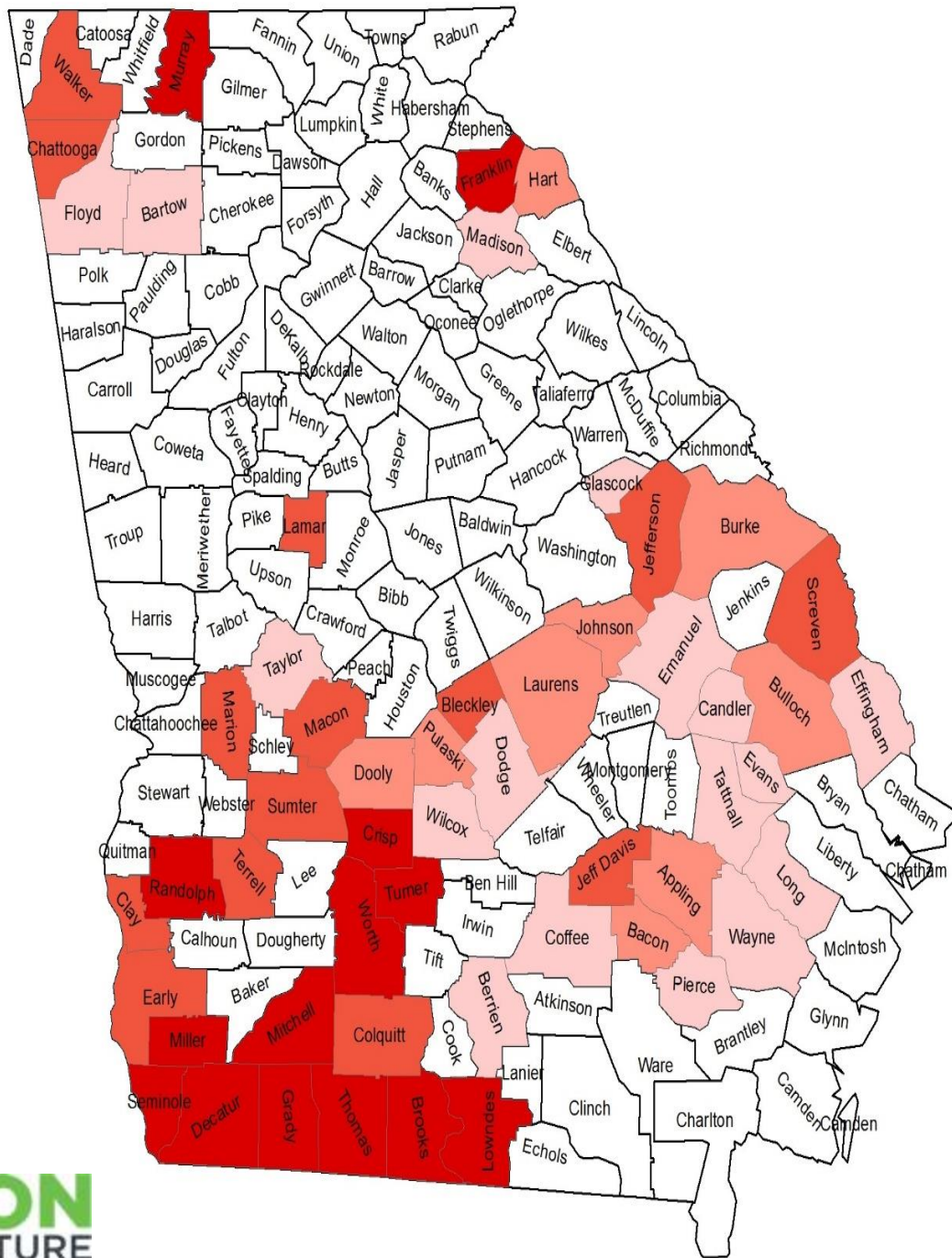
Alabama Soybeans 2014 Yield Per Harvested Acre by County



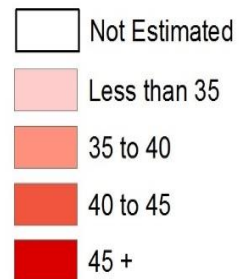
Arkansas Soybeans 2014 Yield Per Harvested Acre by County



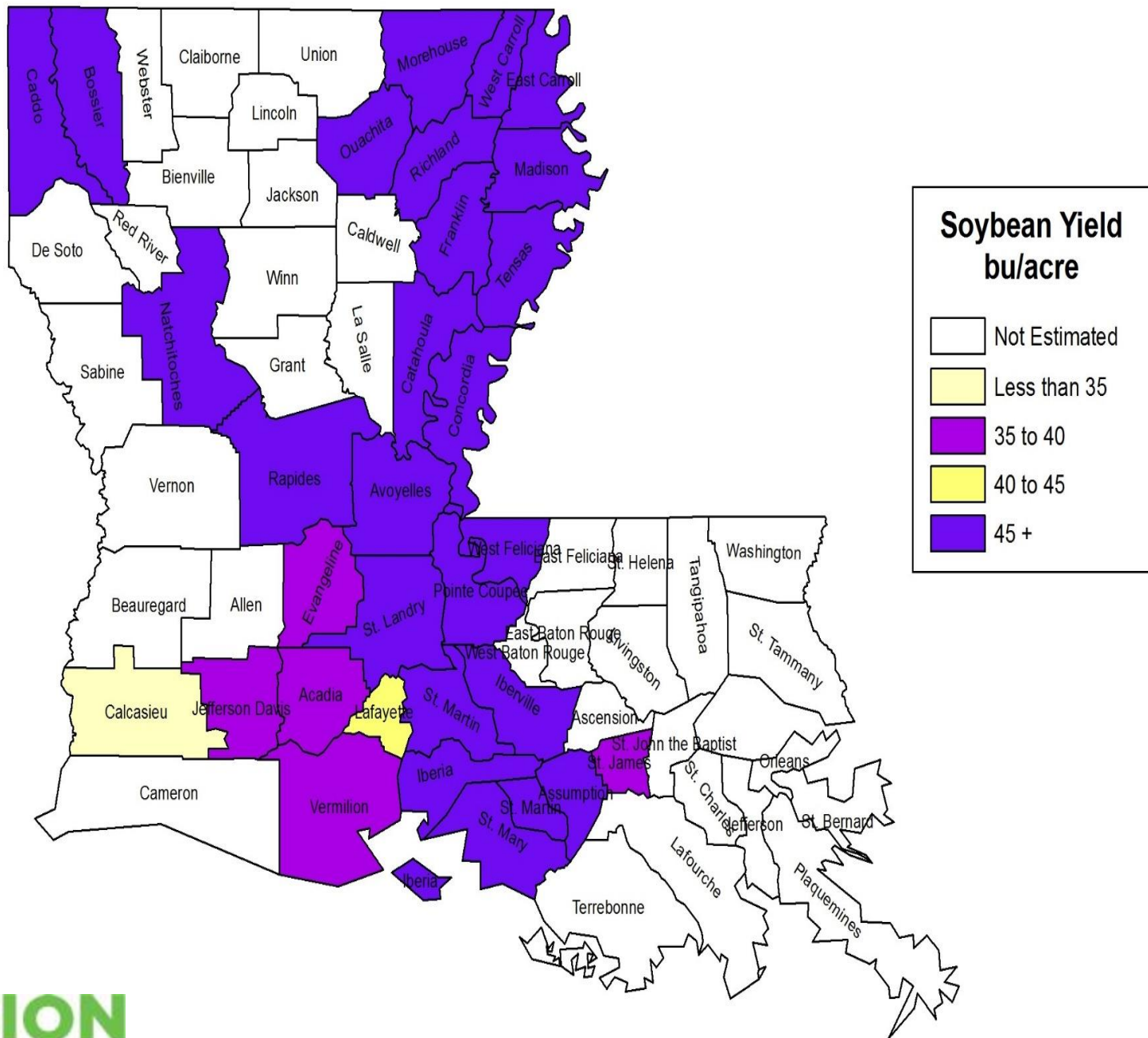
Georgia Soybeans 2014 Yield Per Harvested Acre by County



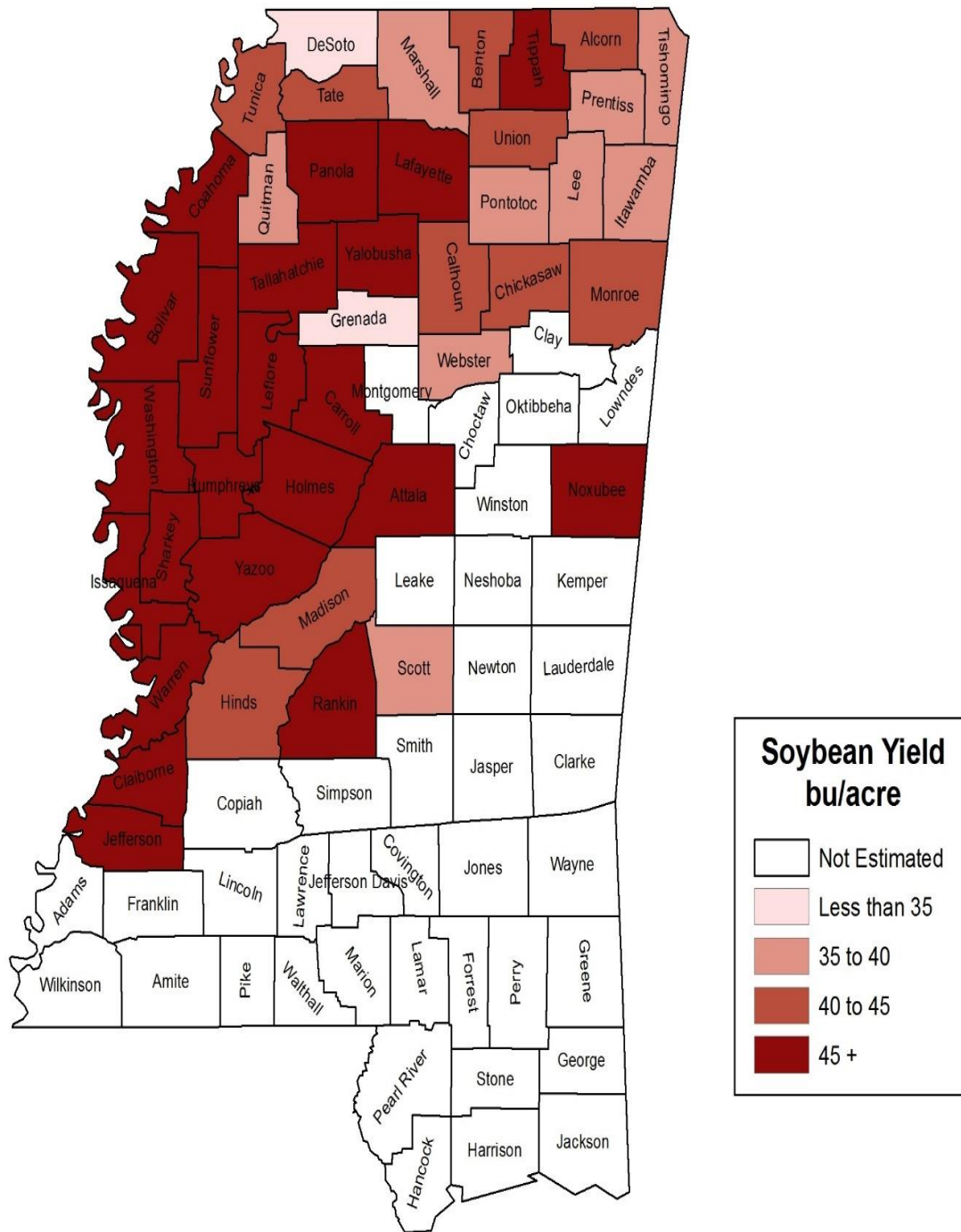
**Soybean Yield
bu/acre**

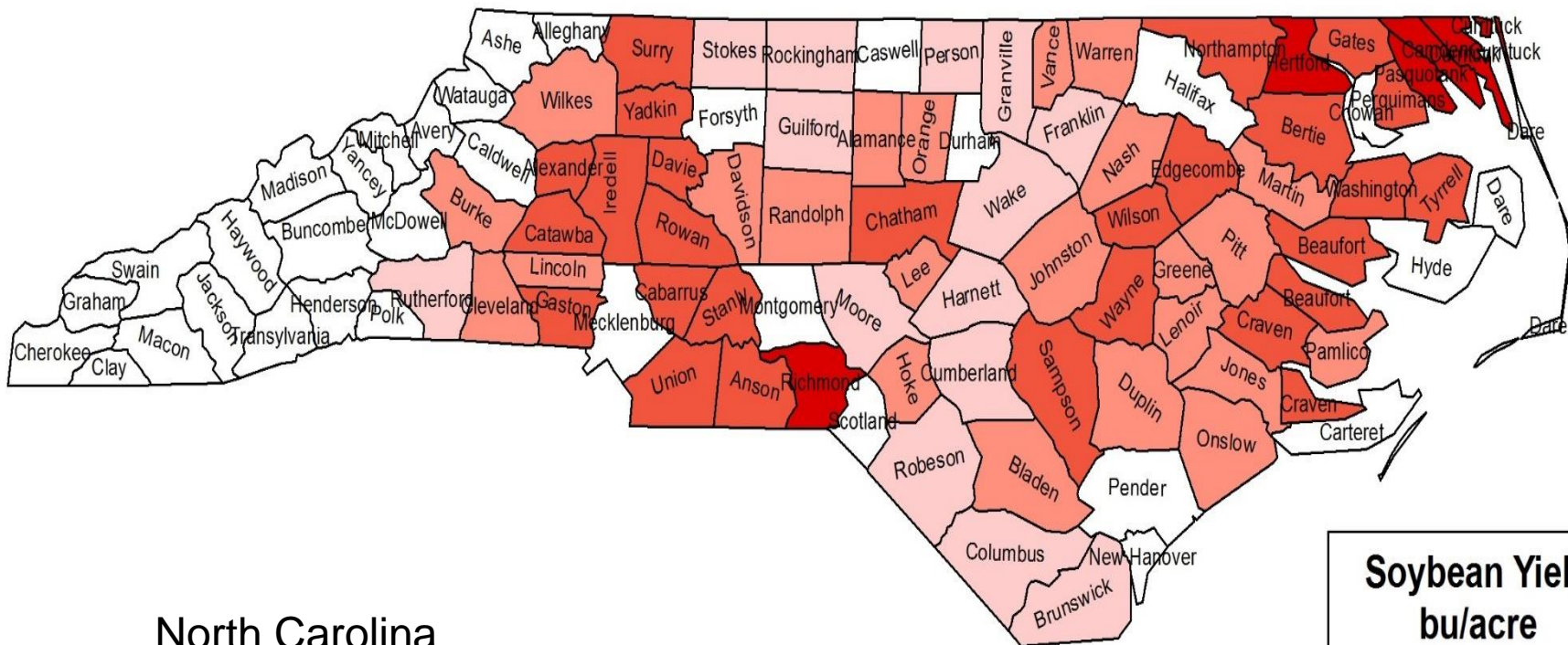


Louisiana
Soybeans 2014
Yield Per
Harvested Acre
by County



Mississippi Soybeans 2014 Yield Per Harvested Acre by County

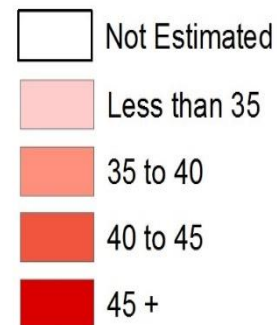


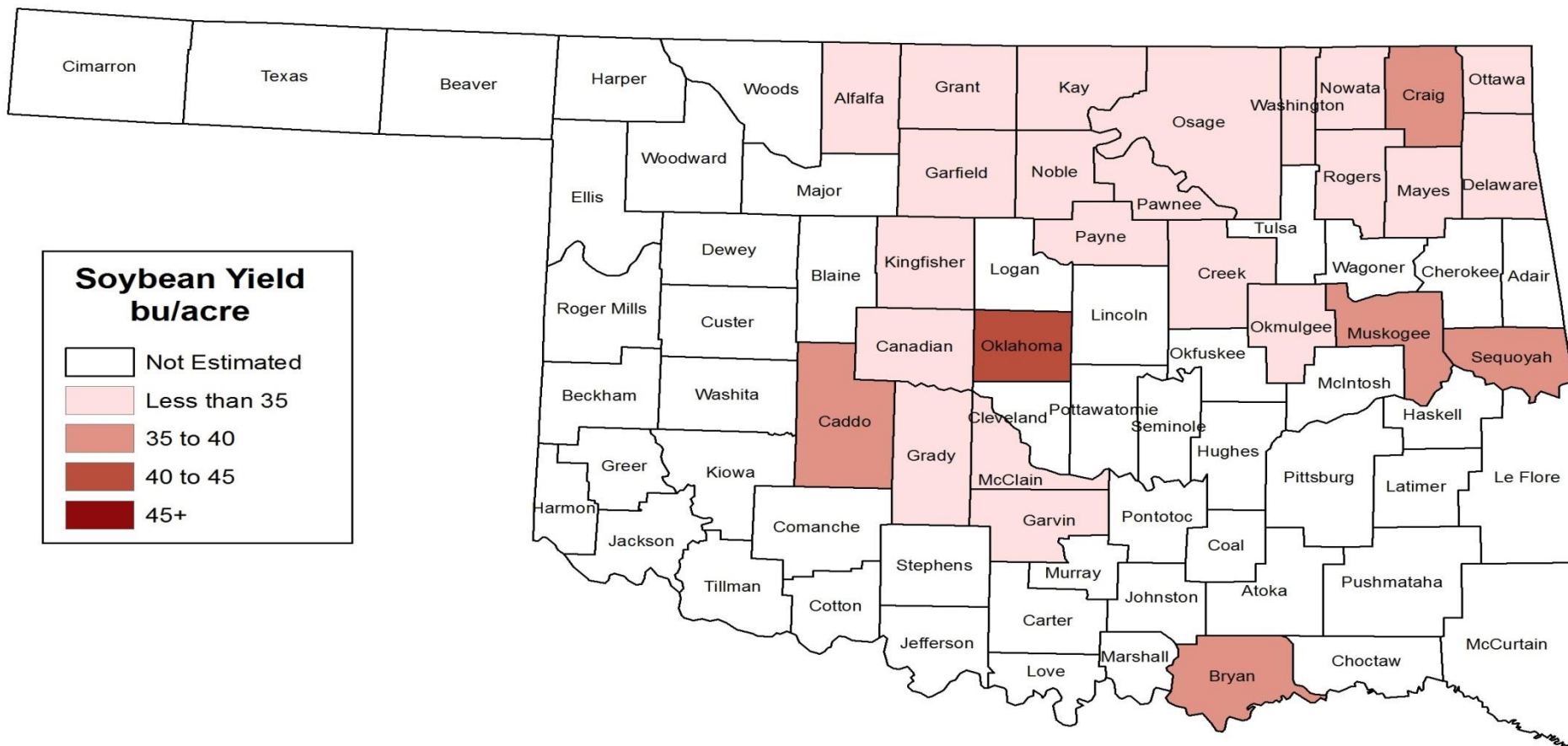


North Carolina Soybeans 2014

Yield Per Harvested Acre by County

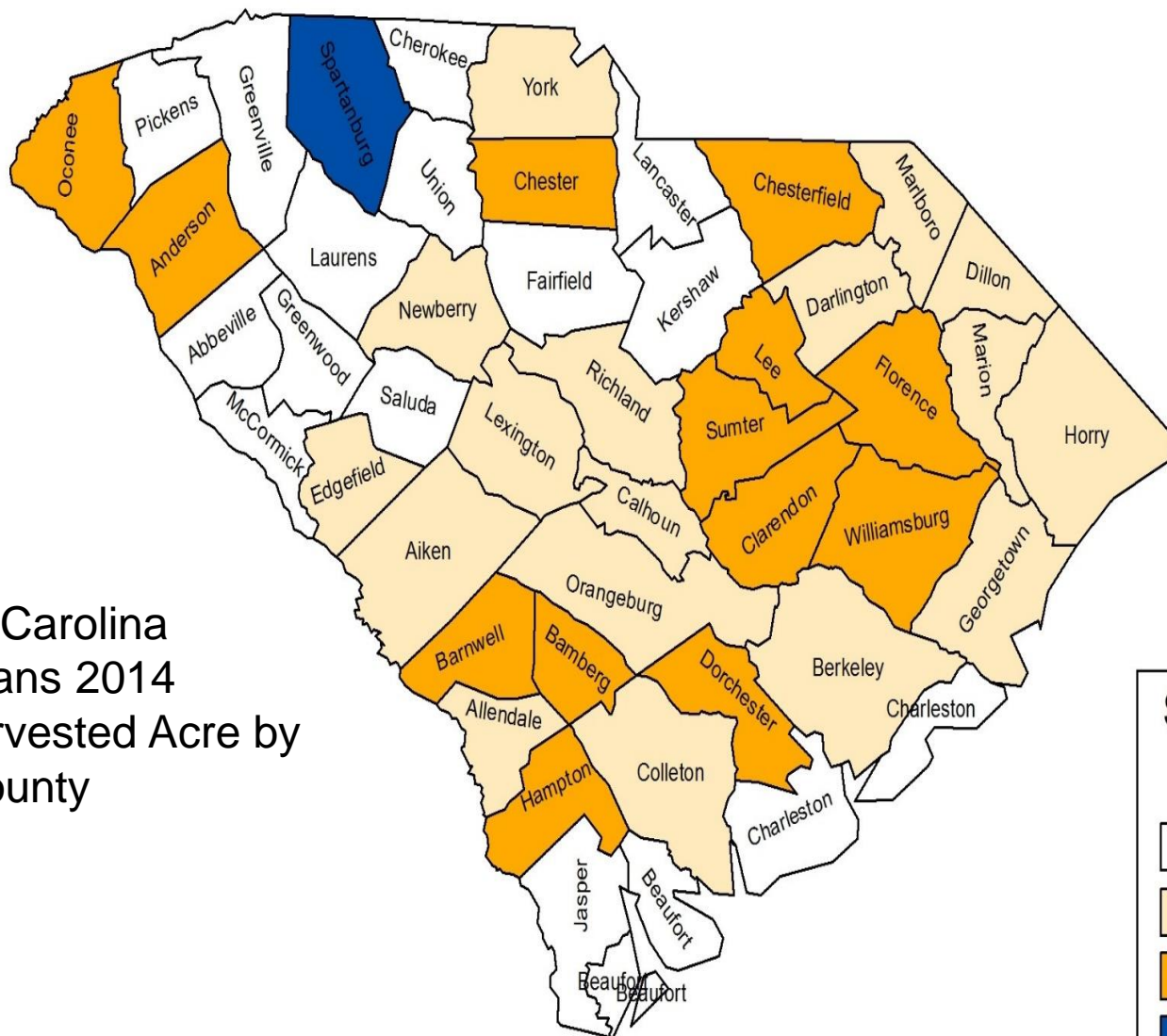
Soybean Yield bu/acre



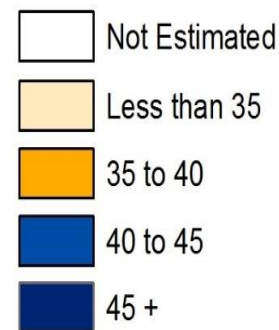


Oklahoma
Soybeans 2014
Yield Per Harvested Acre by County

South Carolina Soybeans 2014 Yield Per Harvested Acre by County



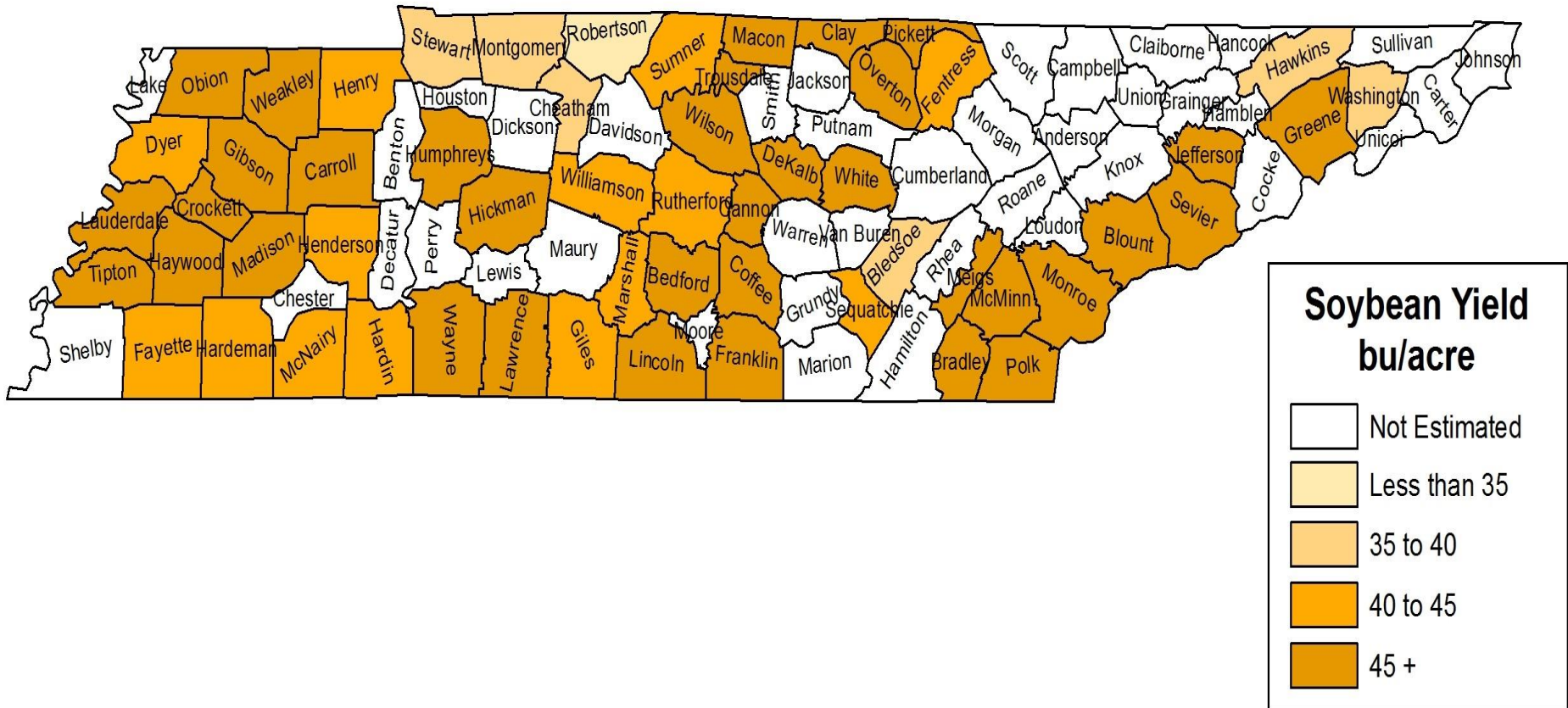
Soybean Yield bu/acre



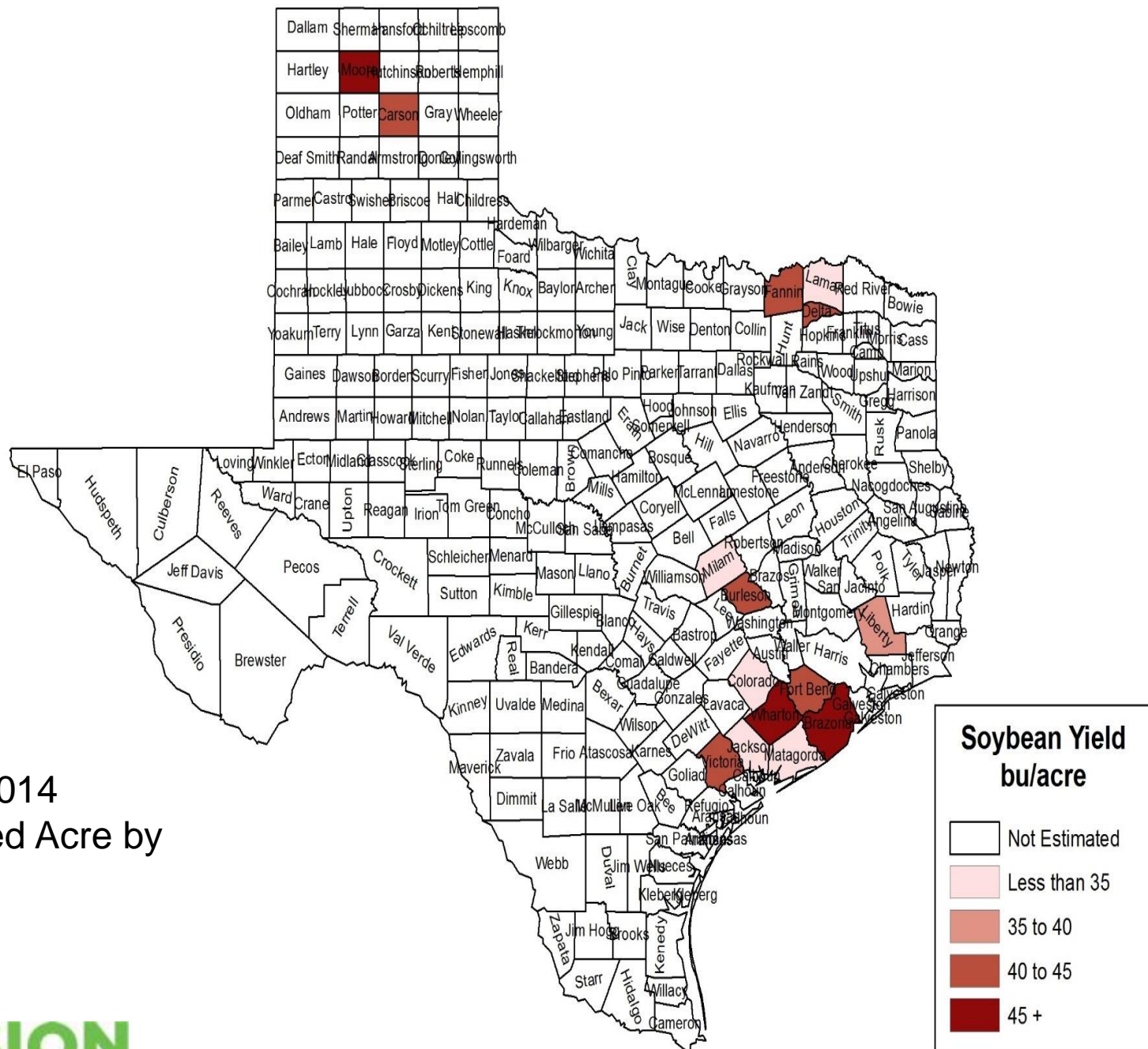
Tennessee

Soybeans 2014

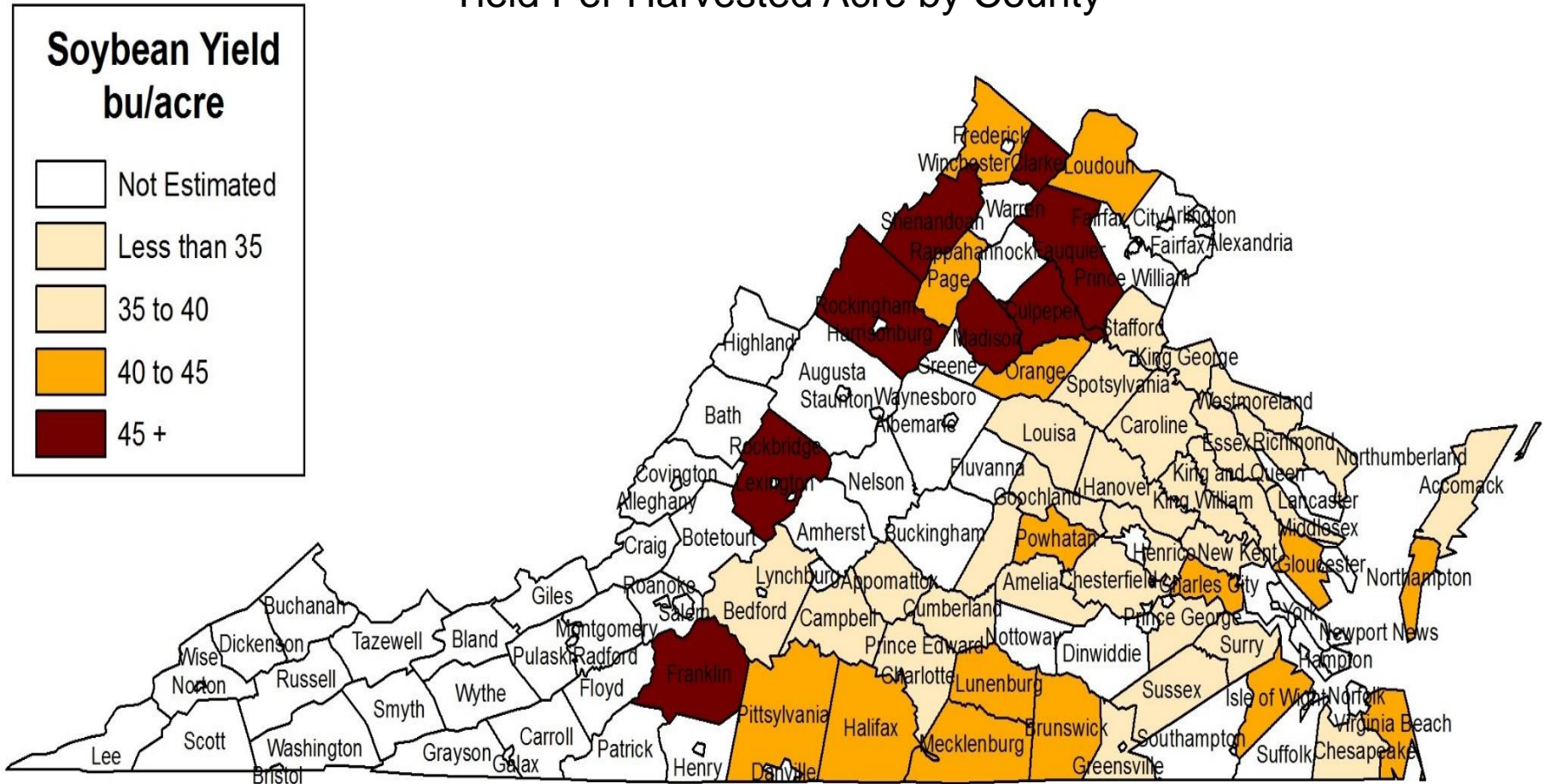
Yield Per Harvested Acre by County



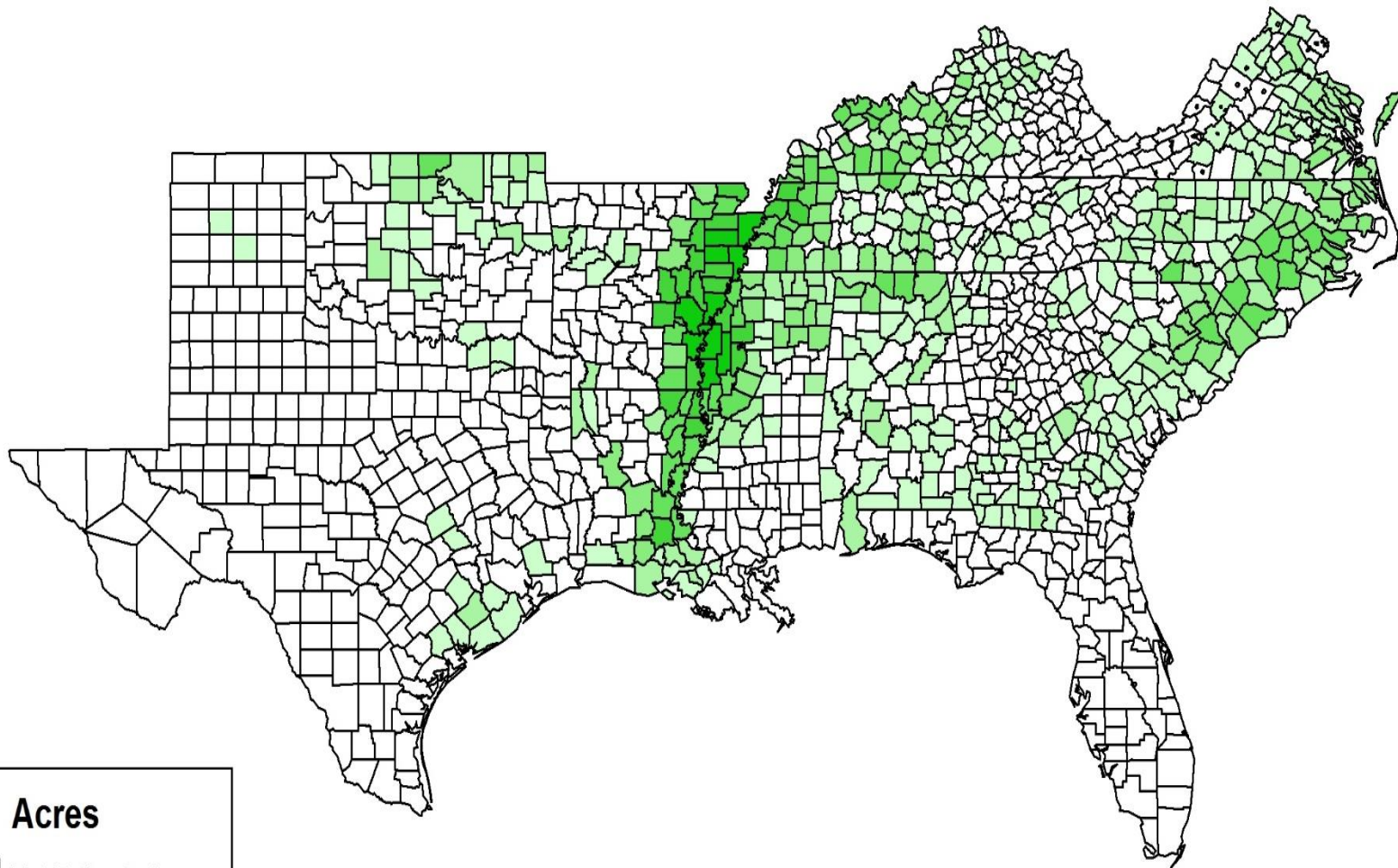
Texas Soybeans 2014 Yield Per Harvested Acre by County



Virginia Soybeans 2014 Yield Per Harvested Acre by County

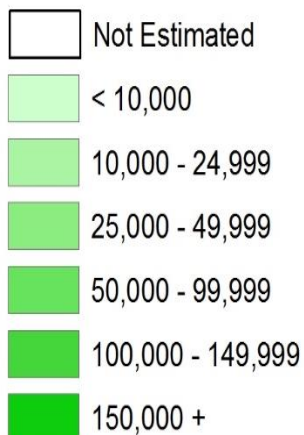


2014 ACREAGE

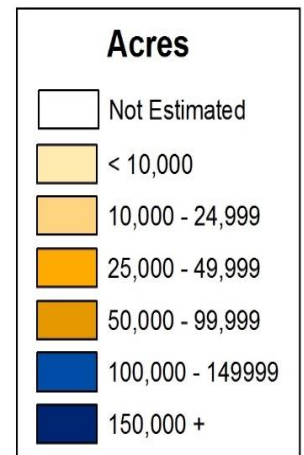
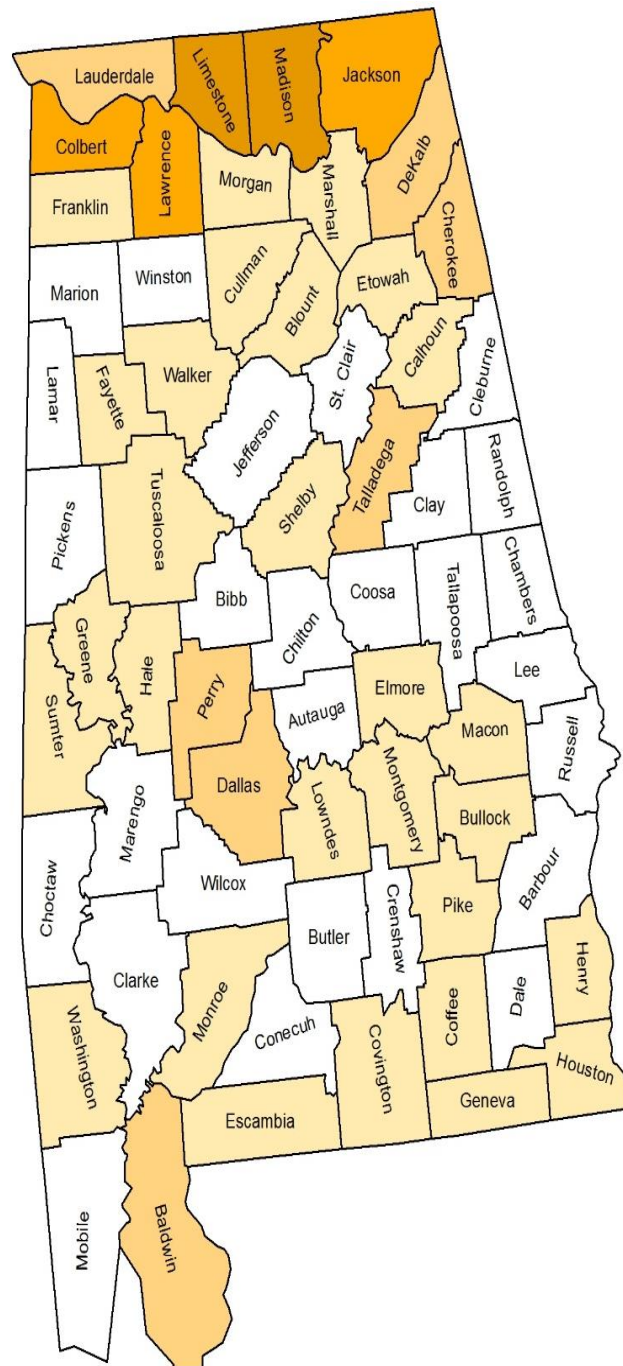


Soybeans 2014
Planted Acres by County
for Selected States

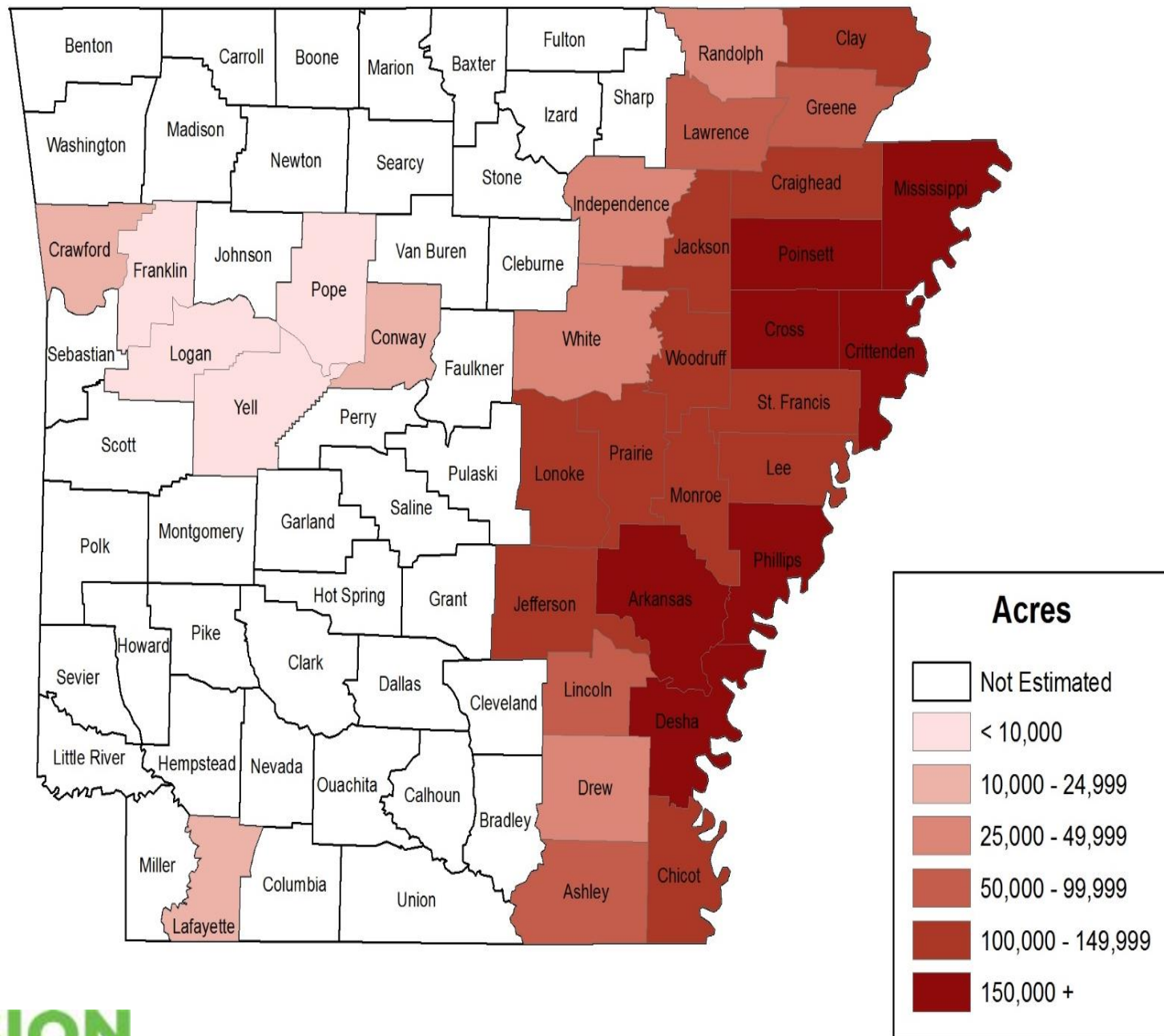
Acres



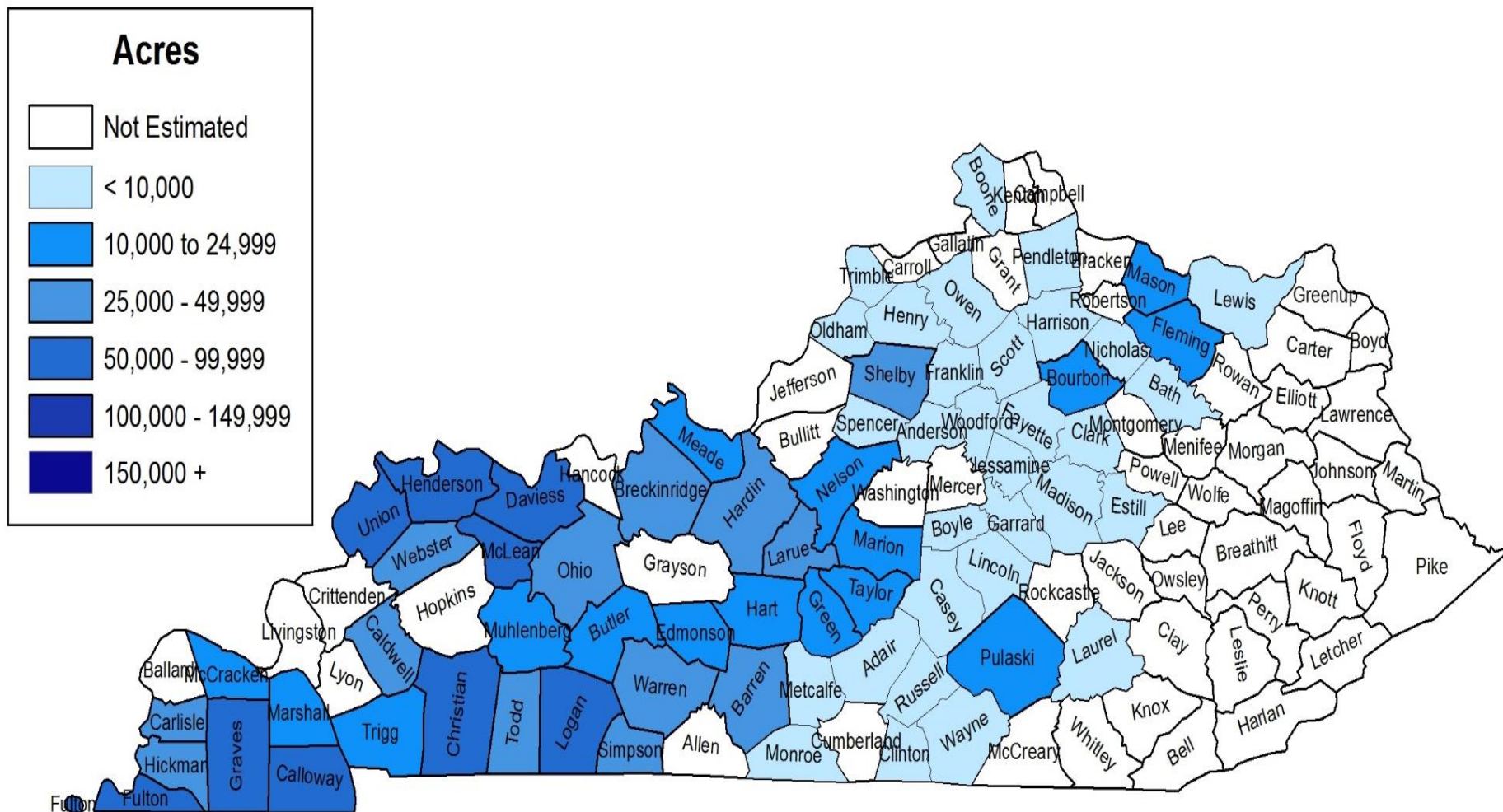
Alabama Soybeans 2014 Planted Acres by County



Arkansas Soybeans 2014 Planted Acres by County

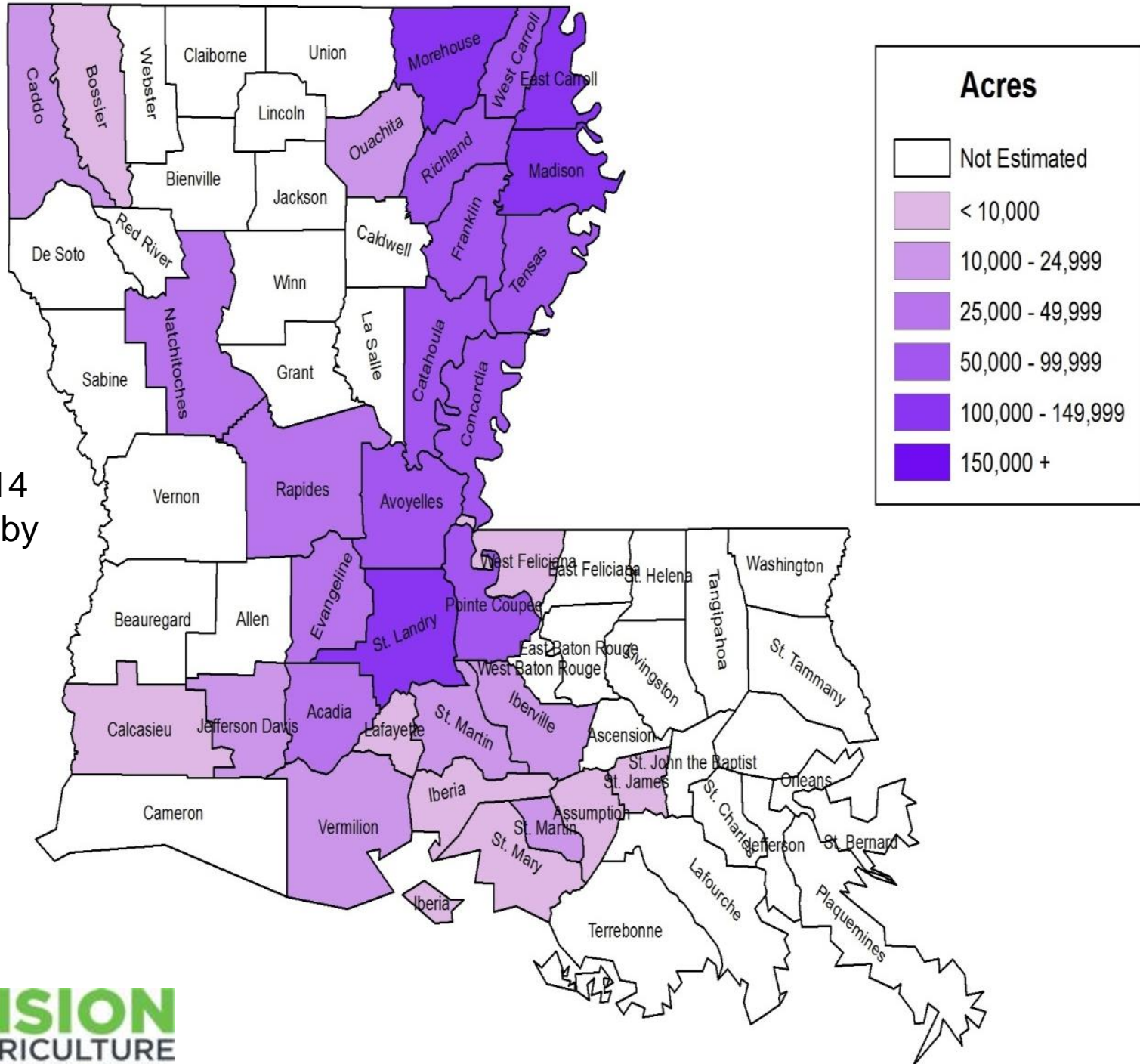




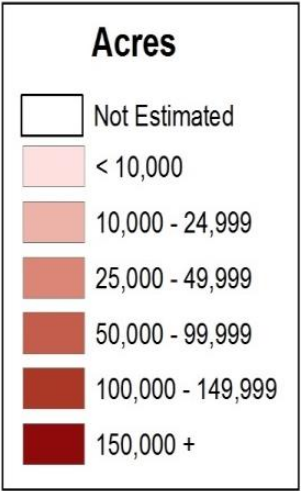


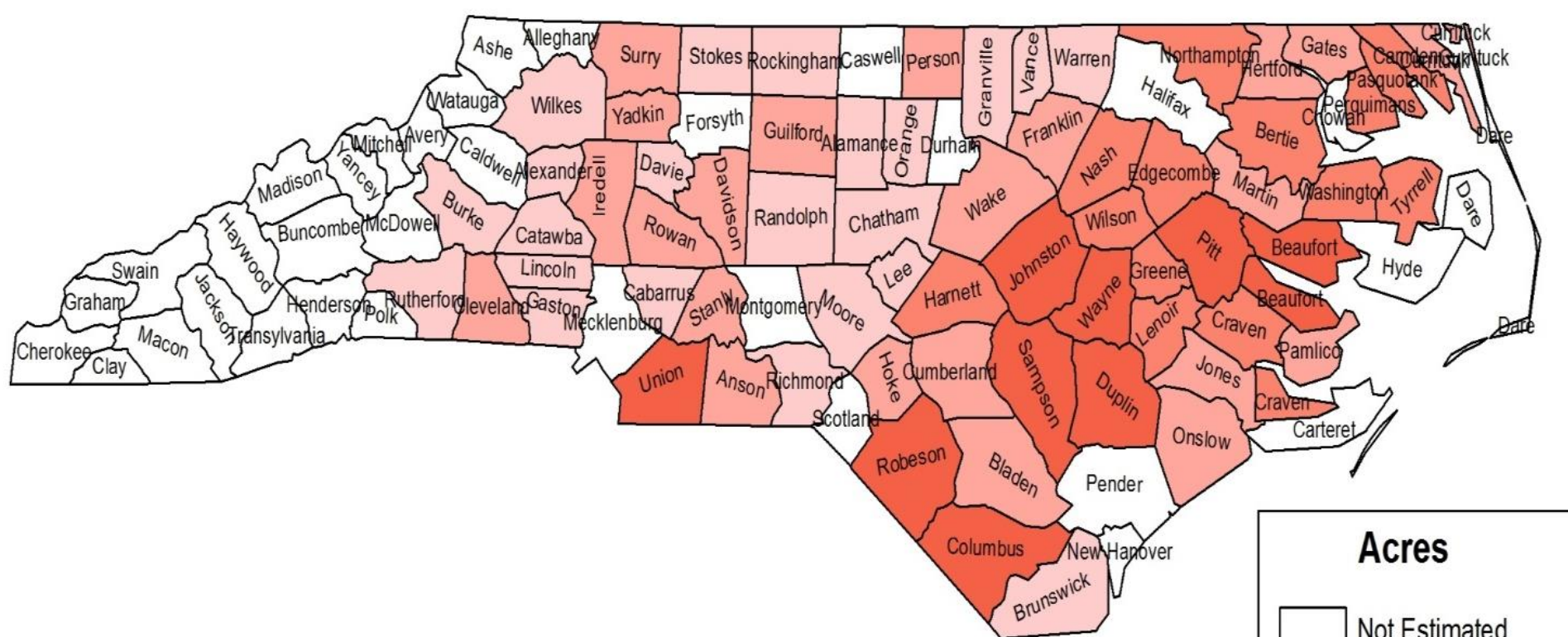
Kentucky
Soybeans 2014
Planted Acres by County

Soybeans 2014 Planted Acres by County

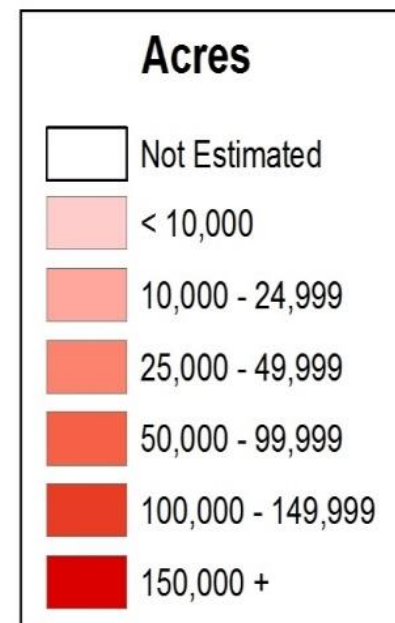


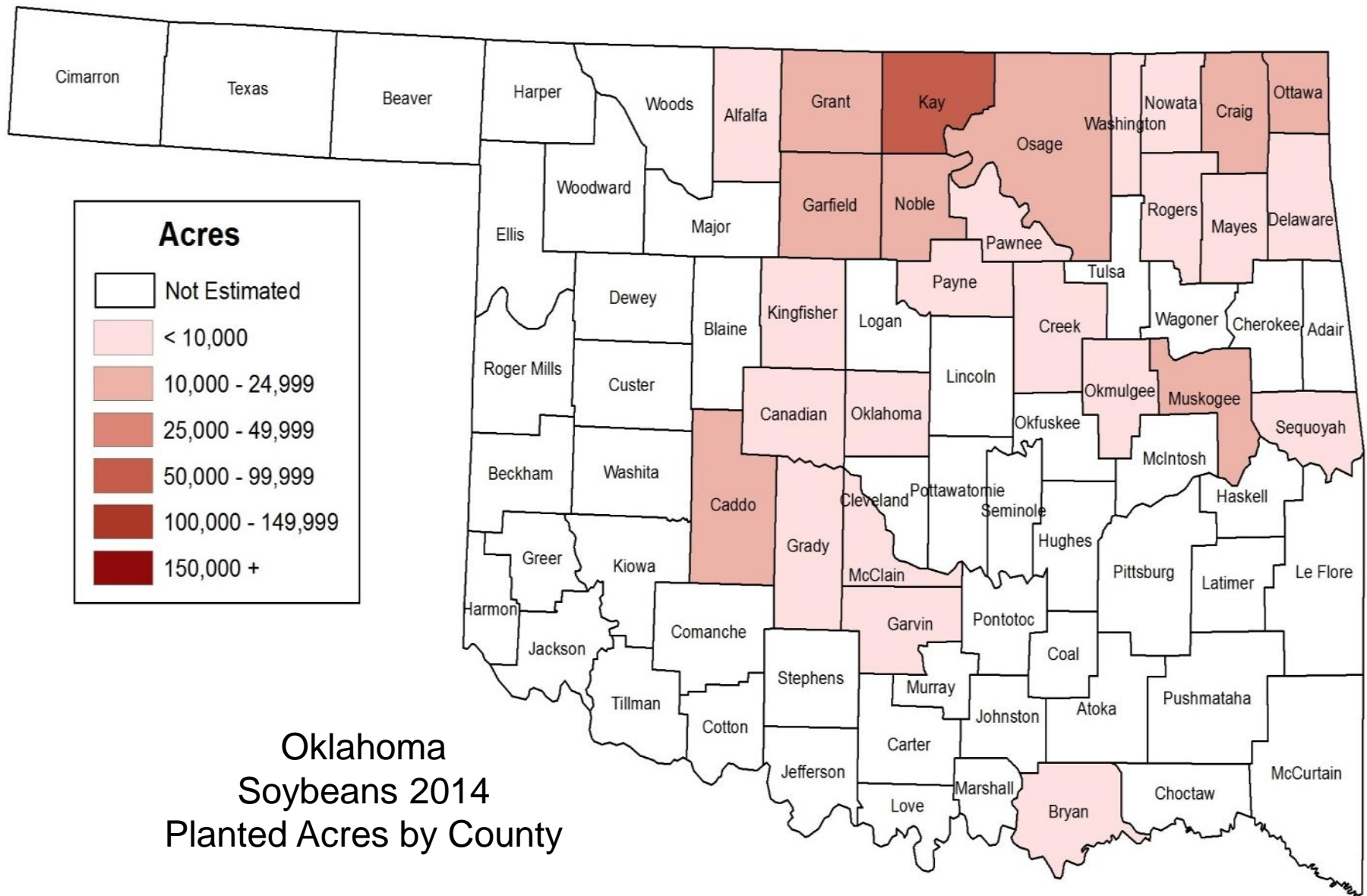
Planted Acres by County





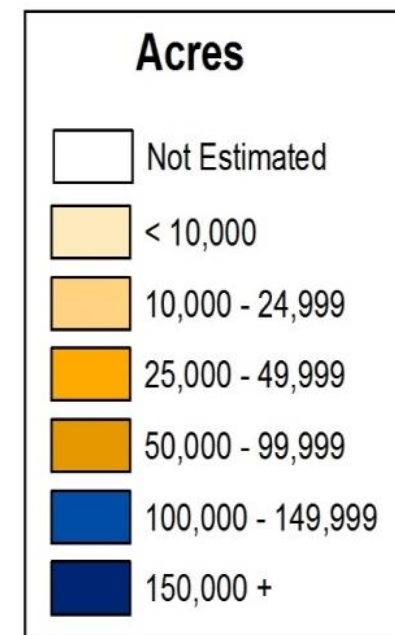
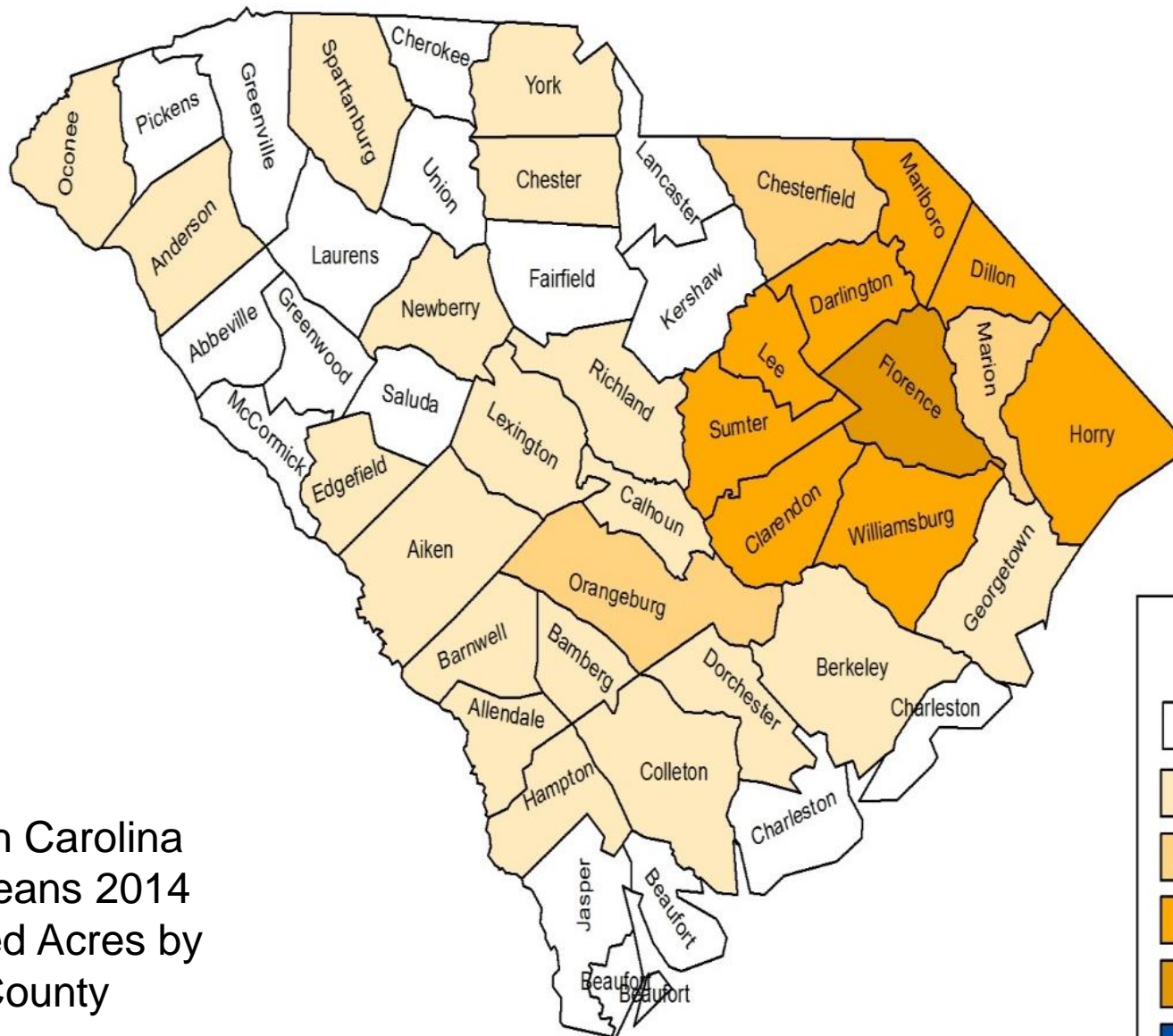
North Carolina
Soybeans 2014
Planted Acres by County



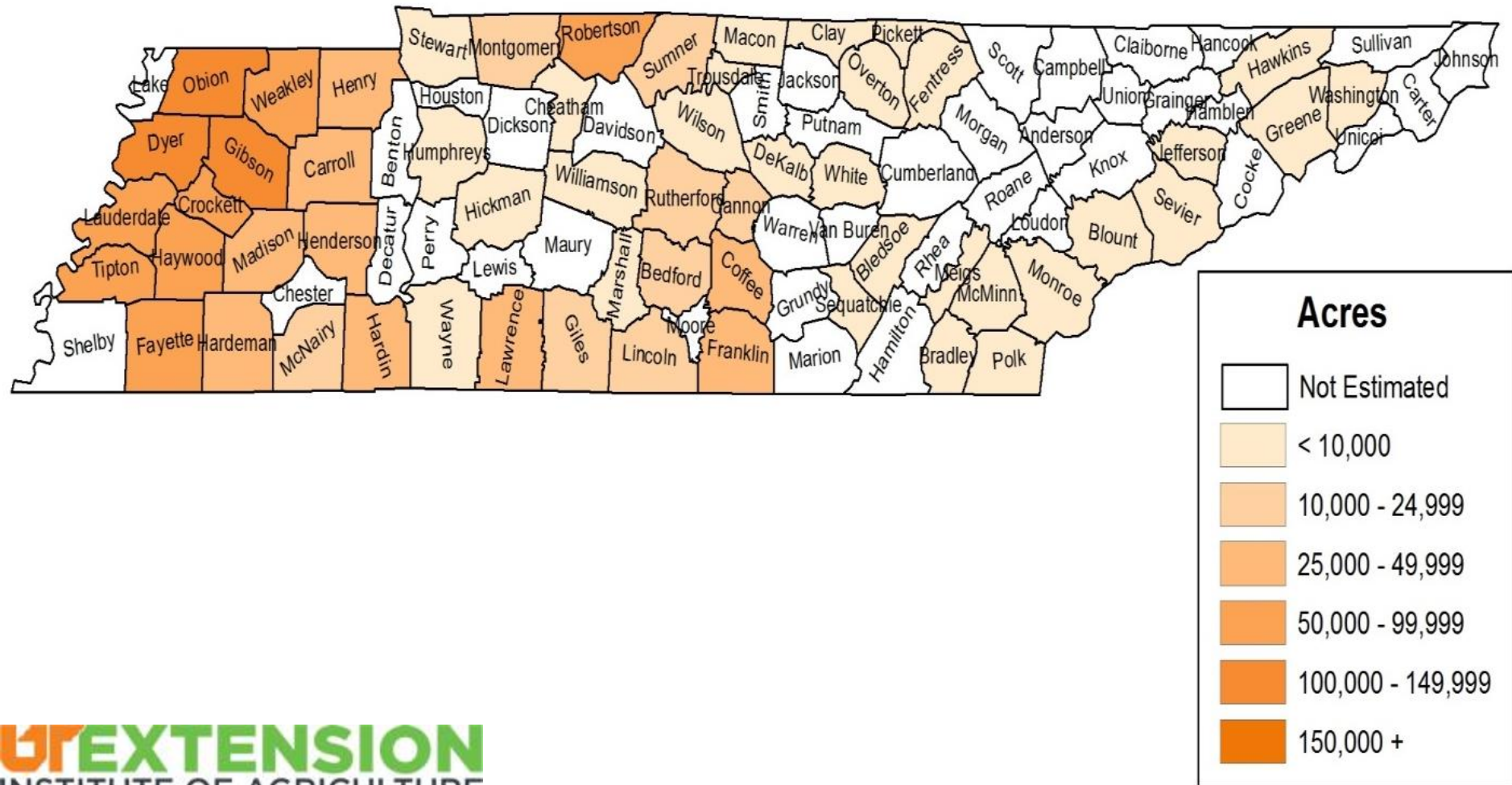


Oklahoma
Soybeans 2014
Planted Acres by County

South Carolina
Soybeans 2014
Planted Acres by
County

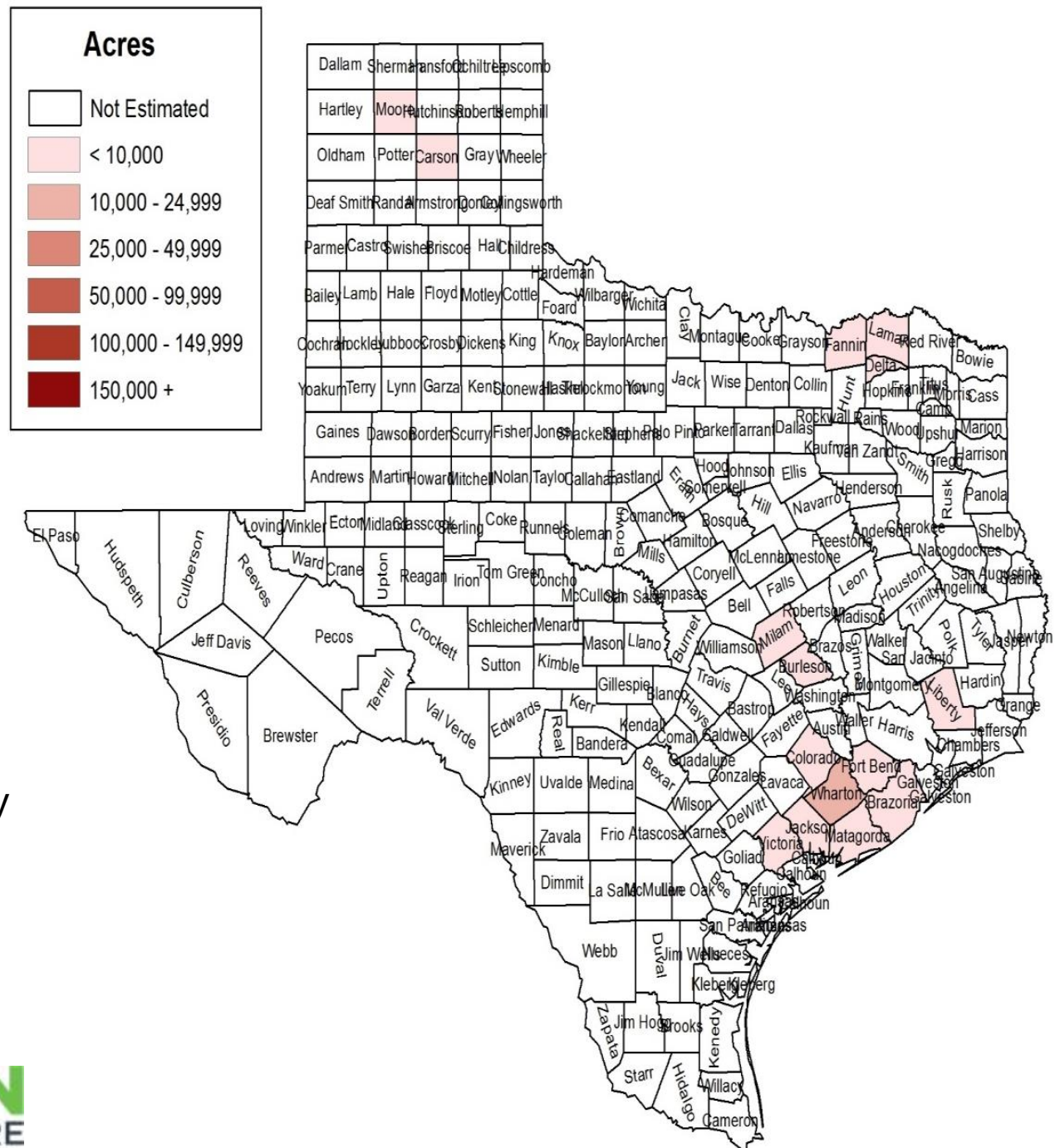


Tennessee
Soybeans 2014
Planted Acres by County



Soybeans 2014

Planted Acres by County



Virginia

Soybeans 2014

Planted Acres by County

