



MISSISSIPPI STATE
UNIVERSITYTM

Agricultural Economics

Grain Outlook

Brian R. Williams

Department of Agricultural Economics

Mississippi State University

December 1, 2017

What Drives Commodity Markets? The fundamentals.

☐ Supply

- Yields
- Ending Stocks
- Production

☐ Demand

- Feed Use
- Exports
- Fuel
- More...



MISSISSIPPI STATE
UNIVERSITY

Department of Agricultural Economics

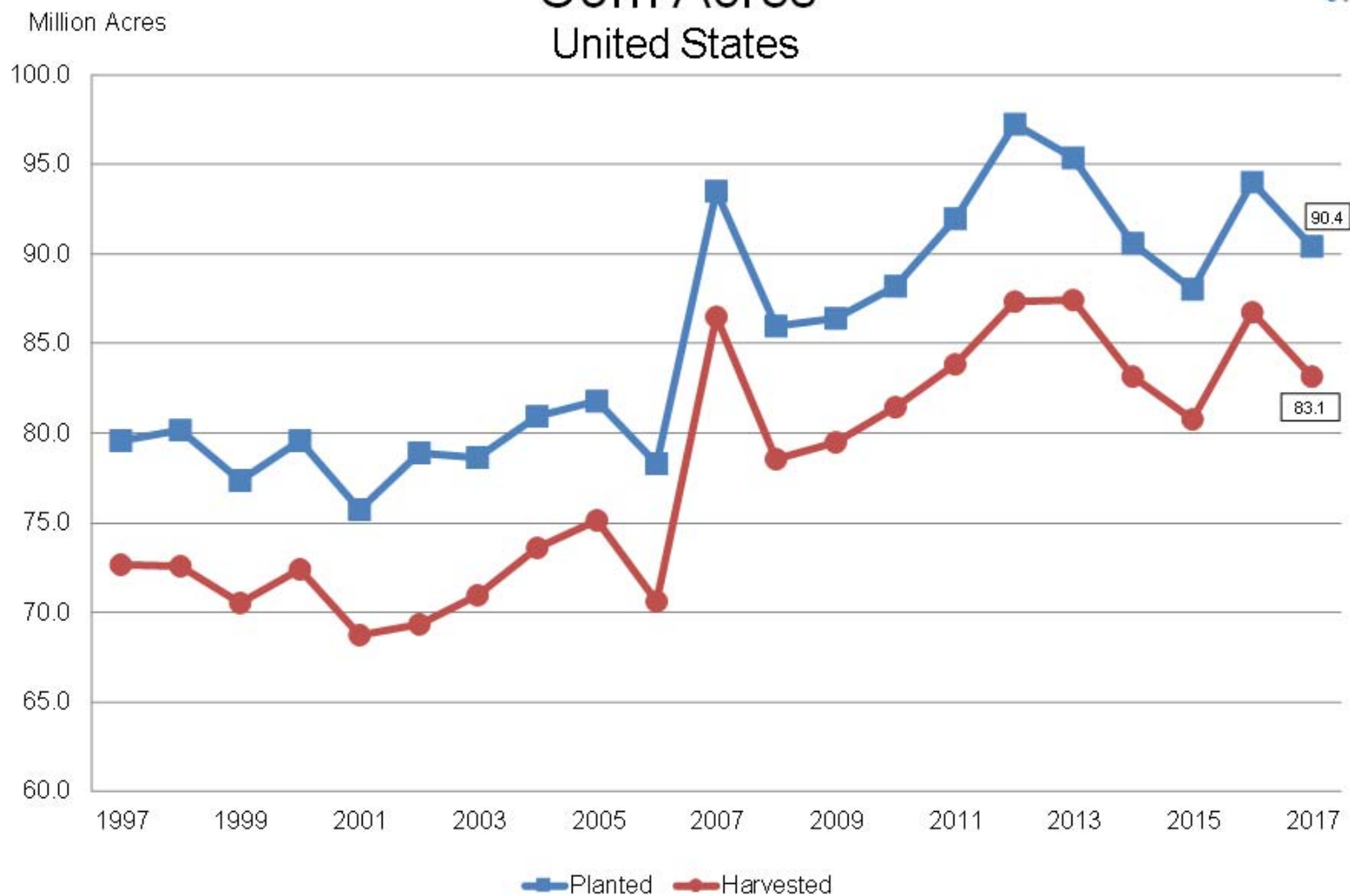
Corn



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



Corn Acres United States



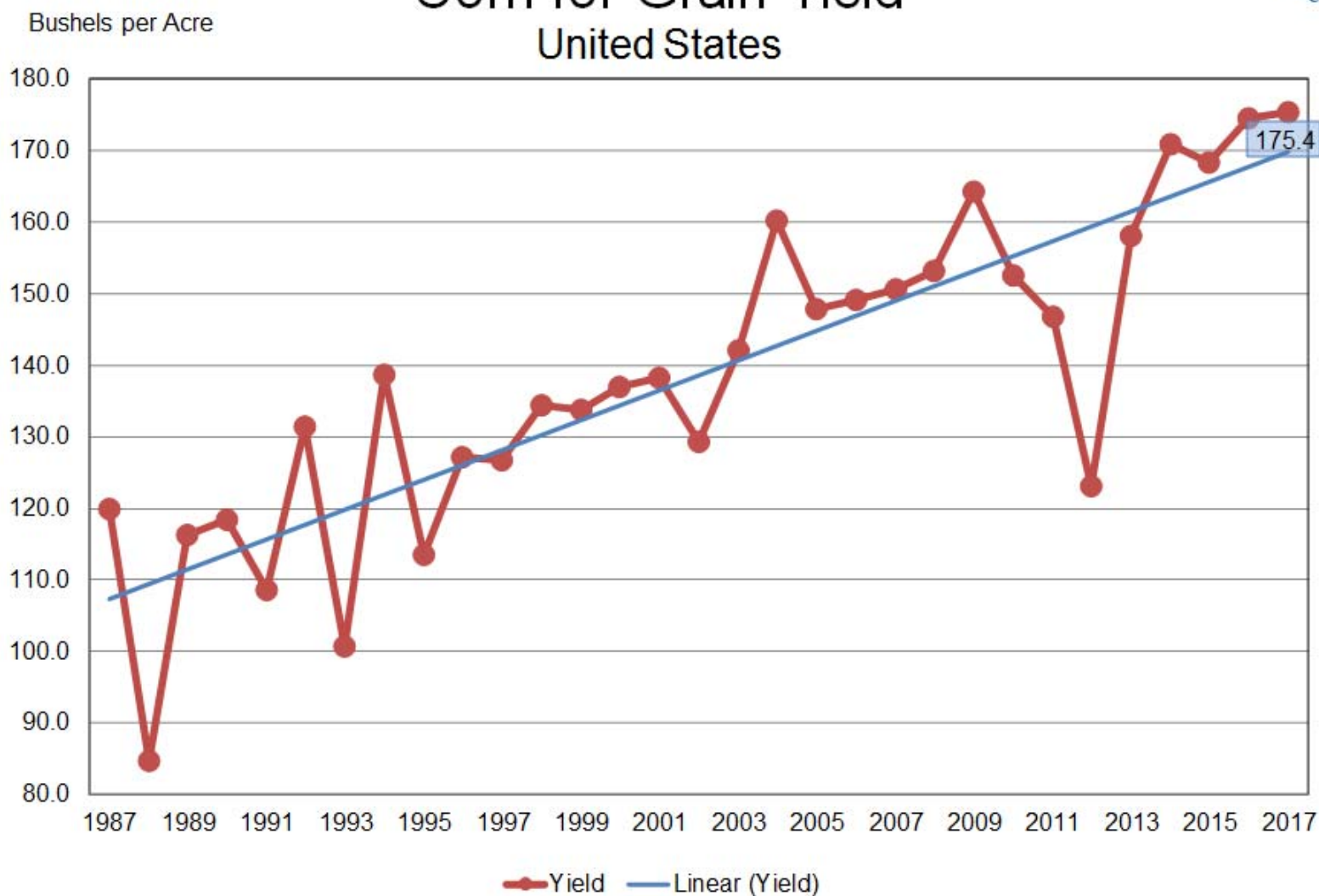
USDA-NASS
10-12-17



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



Corn for Grain Yield United States



USDA-NASS
11-9-17



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

MSU Corn Hybrid Demonstration Program

2017 Corn Harvest Report

MSU Extension: Dr. Ernie Flint/Jenny Bibb
Culture: Dryland

Location: Natchez, MS
Harvest Date: 8/25/17

Plot #	Participant Brand	Hybrid Number	Grain Yield (bu/a)	Harvest Moisture (%)	Test Weight (lbs/bu)
1	AgriGold	A6499	281	15.0	59.5
2	AgriGold	A6572	294	14.5	61.4
3	Armor	1717PRO	297	14.8	60.3
4	Croplan	5290DG	276	14.8	59.9
5	Croplan	6640	295	14.9	58.7
6	DEKALB	DKC67-44	309	14.8	60.2
7	DEKALB	DKC68-26	296	15.0	59.3
8	DEKALB	DKC70-27	321	15.0	60.1
9	Dyna Gro	D57VP75	287	15.0	58.7
10	Pioneer	1316YHR	292	15.0	57.9
11	Progeny	PGY 5115	290	14.9	58.4
12	Progeny	PGY 6116	285	15.5	58.8
Plot Average			294	14.9	59.4



MISSISSIPPI STATE UNIVERSITY™
EXTENSION

MISSISSIPPI STATE
UNIVERSITY™

Department of Agricultural Economics

MSU Corn Hybrid Demonstration Program

2017 Corn Harvest Report

Cooperator: Tony Morgan
MSU Extension Agent: Dr. Bill Burdine
Culture: Dryland

Location: Vardaman, MS
Harvest Date: 8/23/17

Plot #	Participant Brand	Hybrid Number	Grain Yield (bu/a)	Harvest Moisture (%)	Test Weight (lbs/bu)
1	Croplan	5290DG	274	17.1	60.7
2	Dekalb	DKC70-27	304	19.0	59.1
3	Croplan	6640	288	17.1	58.6
4	Progeny	PGY5115	286	17.5	58.2
5	AgriGold	A6499	281	18.1	58.8
6	Dyna-Gro	D57VP75	283	18.1	57.7
7	Armor	1717PRO	274	17.7	59.4
8	AgriGold	A6572	281	17.8	61.1
9	Dekalb	DKC68-26	288	17.4	59.0
10	Pioneer	1316YHR	285	17.5	58.8
11	Dekalb	DKC67-44	322	18.4	59.6
12	Progeny	PGY6116	286	18.9	58.0
Plot Average			288	17.9	59.1

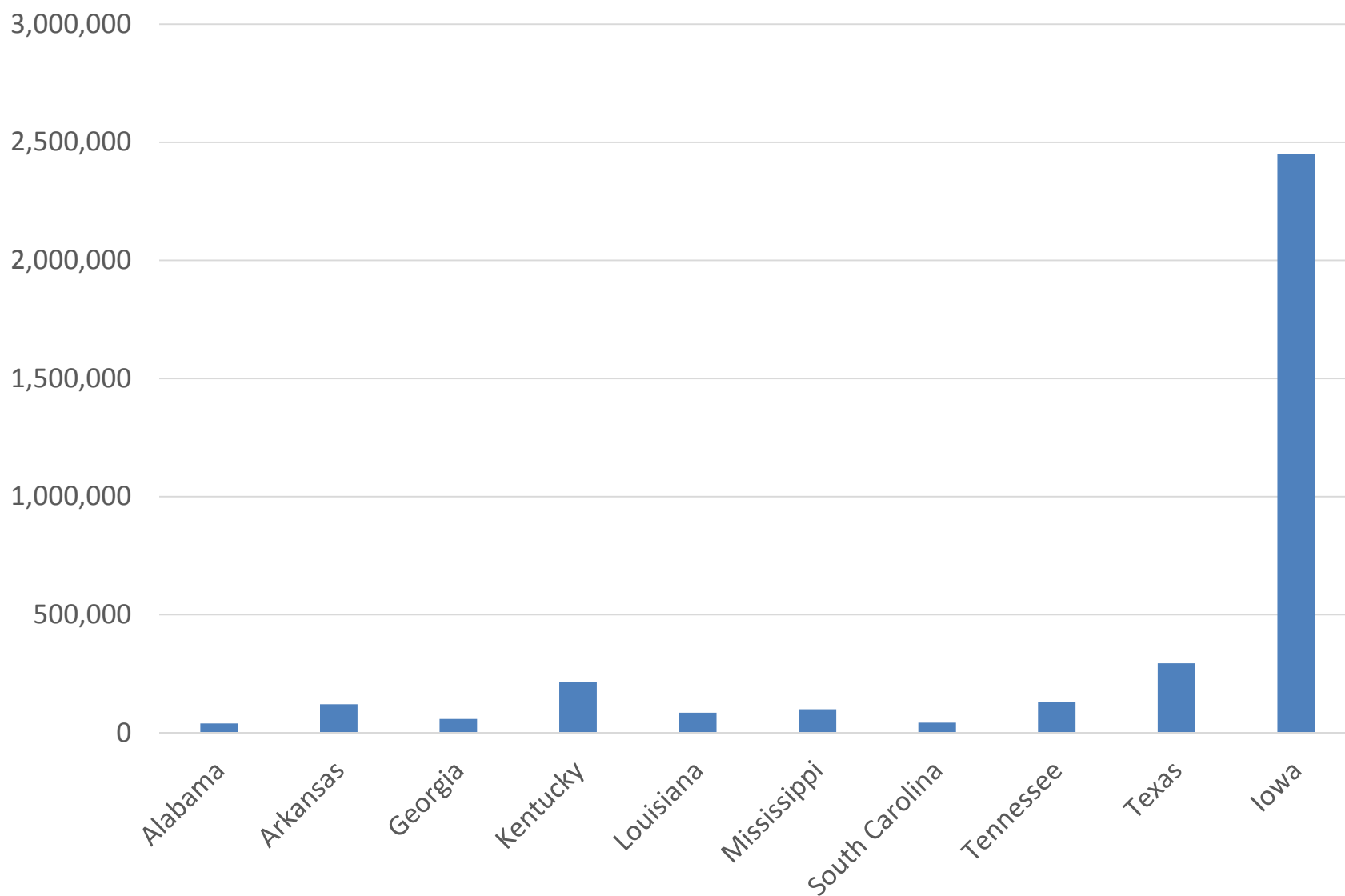


MISSISSIPPI STATE UNIVERSITY™
EXTENSION



MISSISSIPPI STATE
UNIVERSITY™
Department of Agricultural Economics

2017 Corn Production by State (1,000 bu)

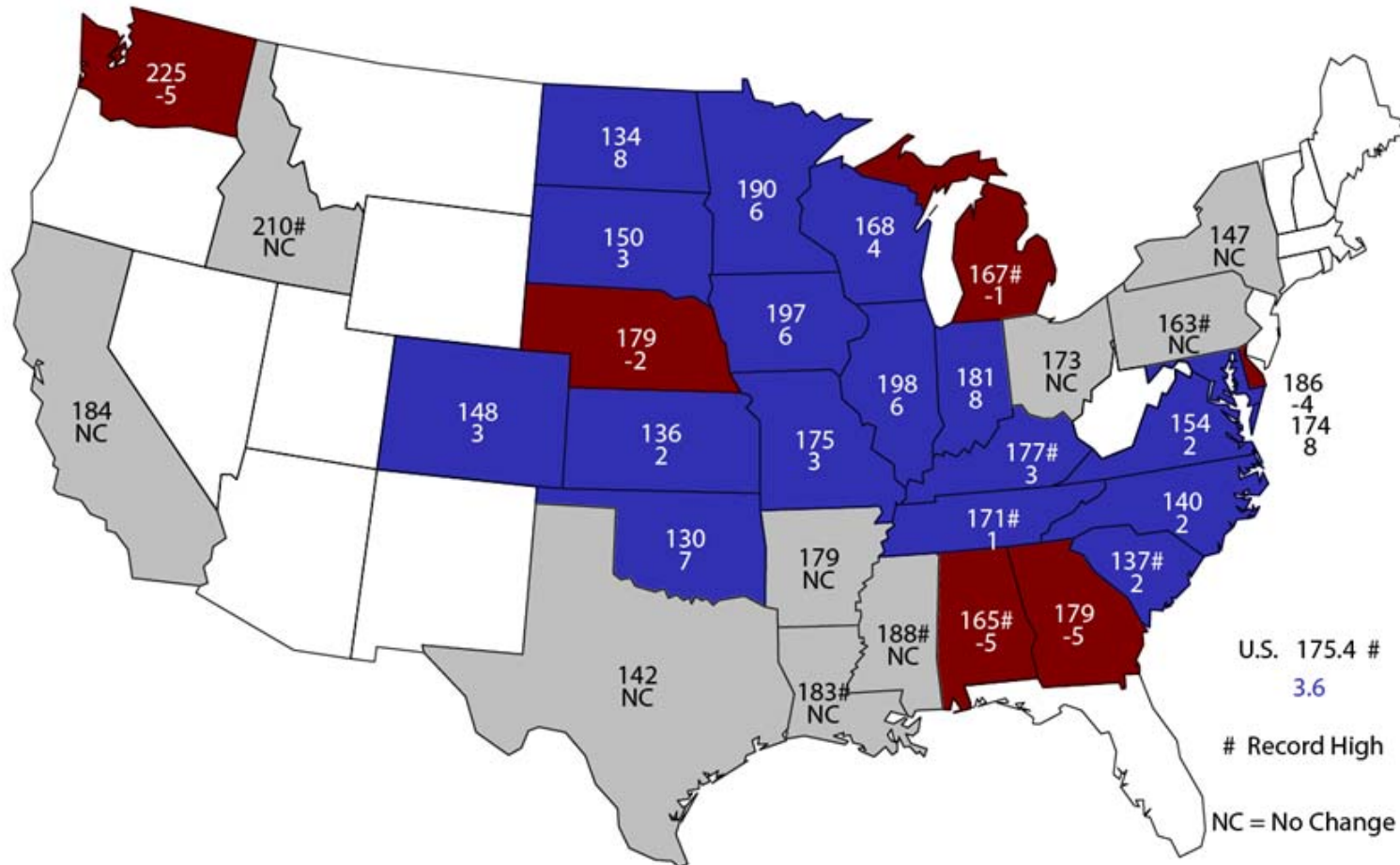


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



November 1, 2017 Corn Yield

Bushels and Change From Previous Forecast



USDA-NASS
11-9-17

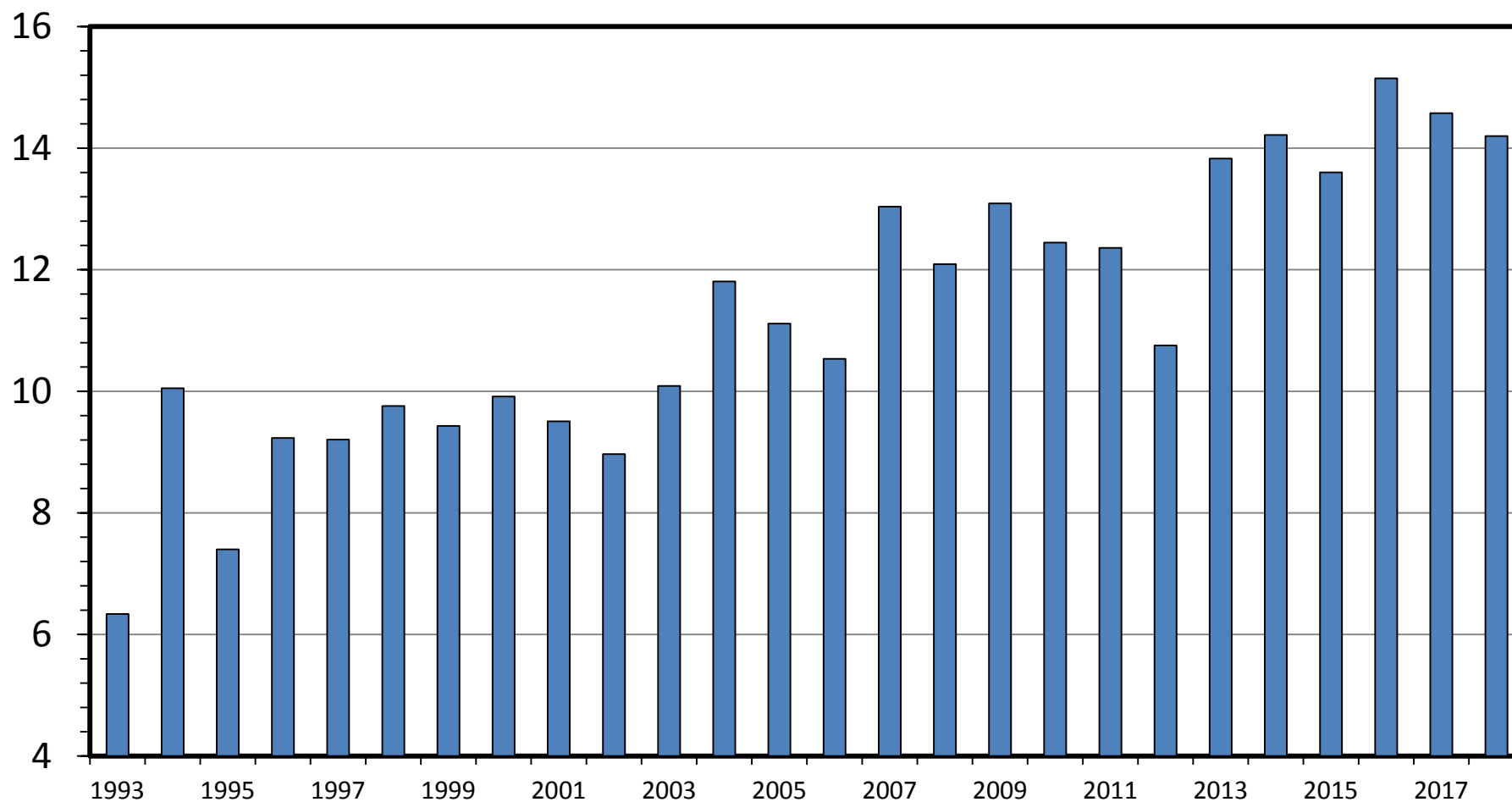


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

US ANNUAL CORN PRODUCTION

Crop Year

Bil. Bushels



Data Source: USDA-NASS, Forecasts by LMIC

Livestock Marketing Information Center

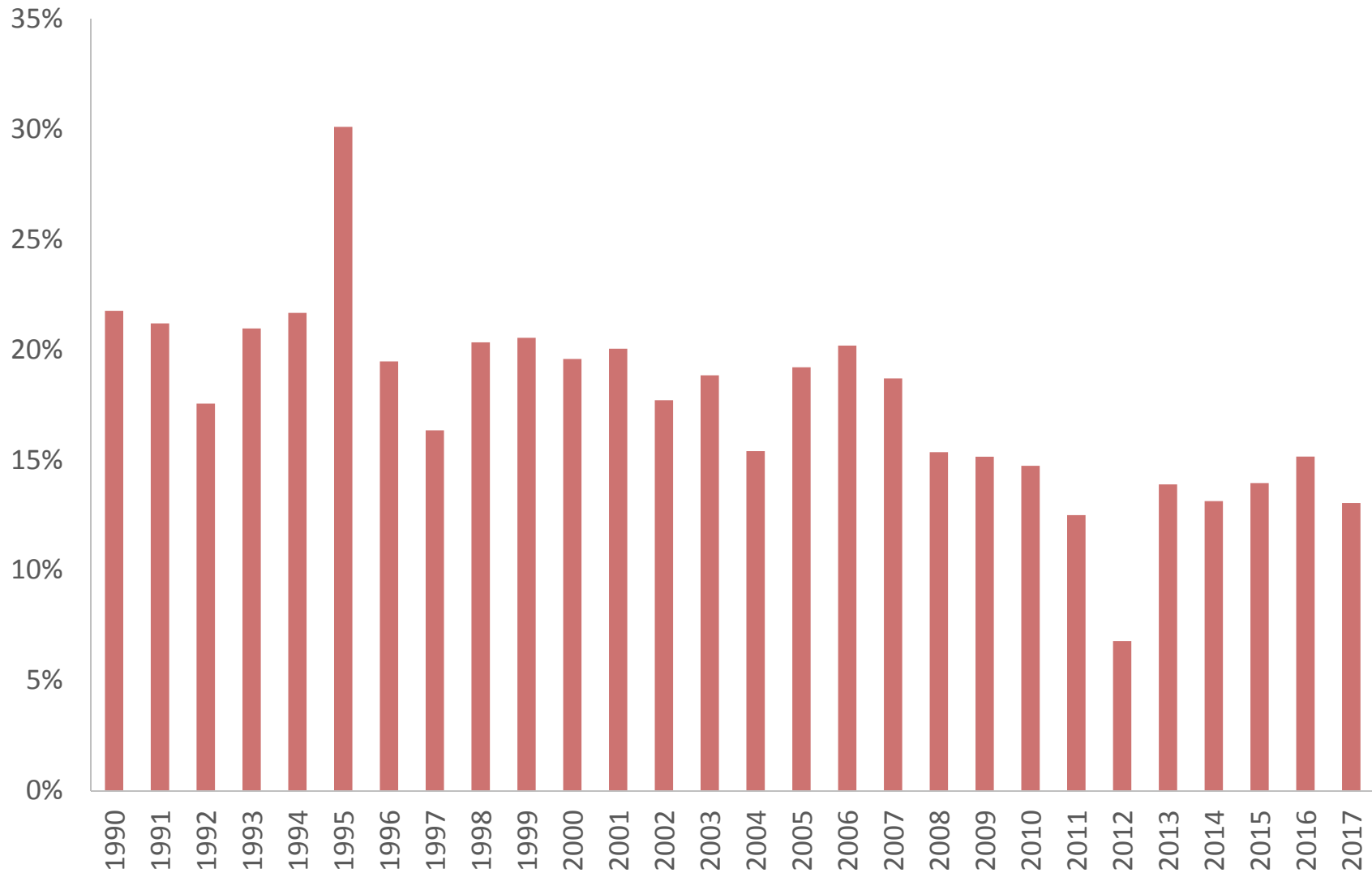


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

G-NP-07

11/11/17

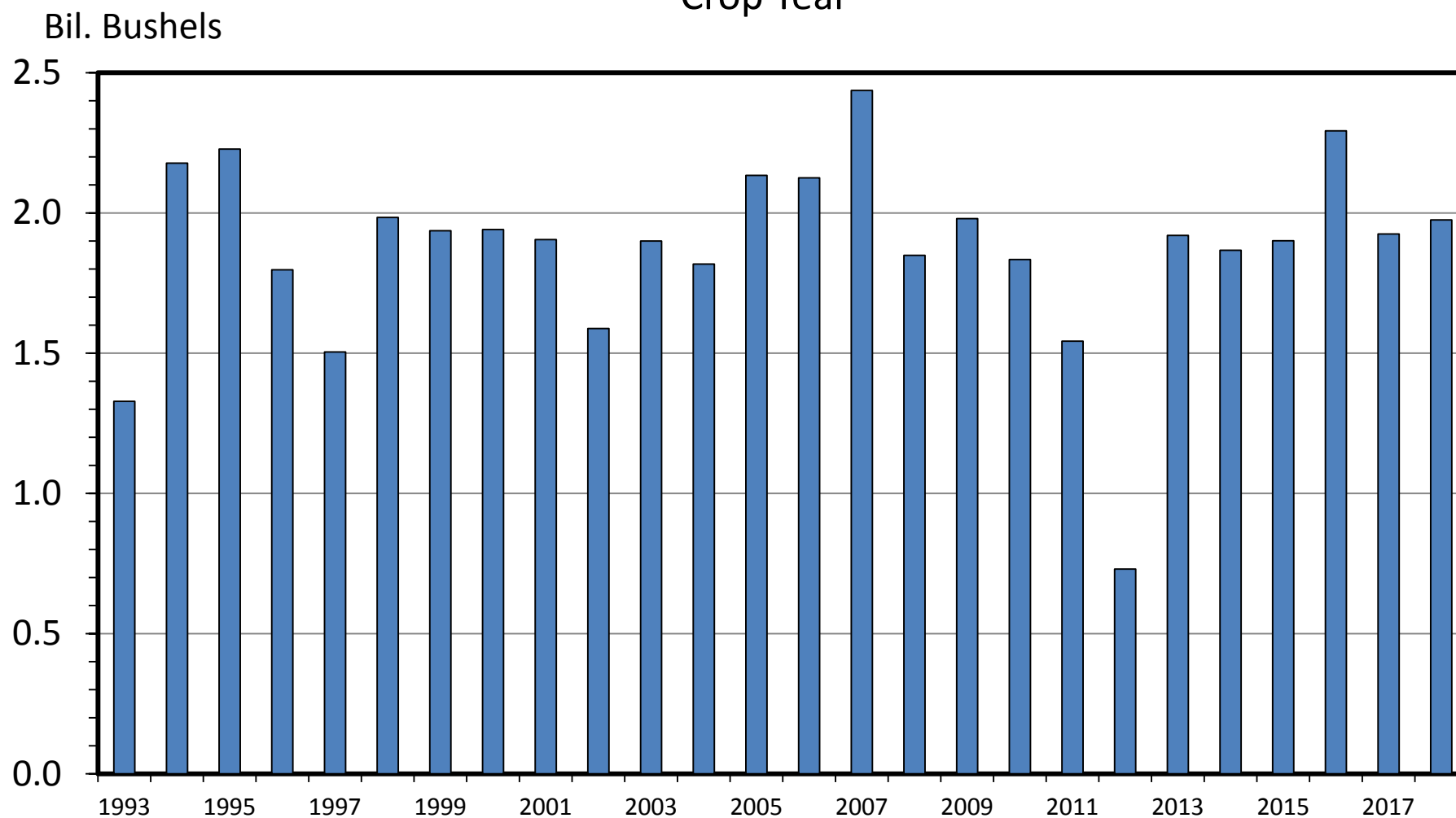
Corn Exports as % of Production



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

US ANNUAL CORN EXPORTS

Crop Year



Data Source: USDA-ERS and WAOB, Forecasts by LIMS

Livestock Marketing Information Center

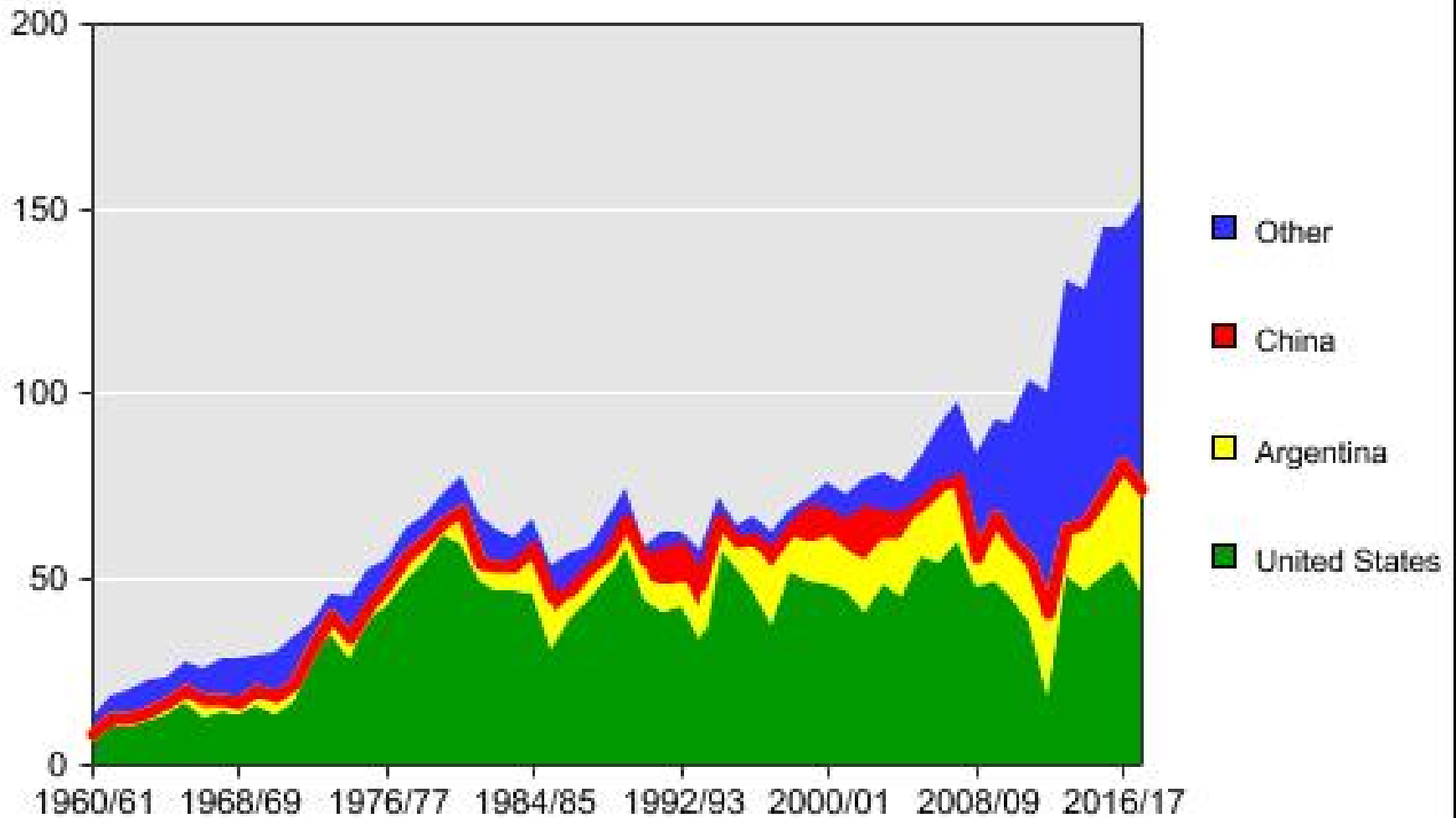


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

G-NP-05
11/11/17

Leading world exporters of corn

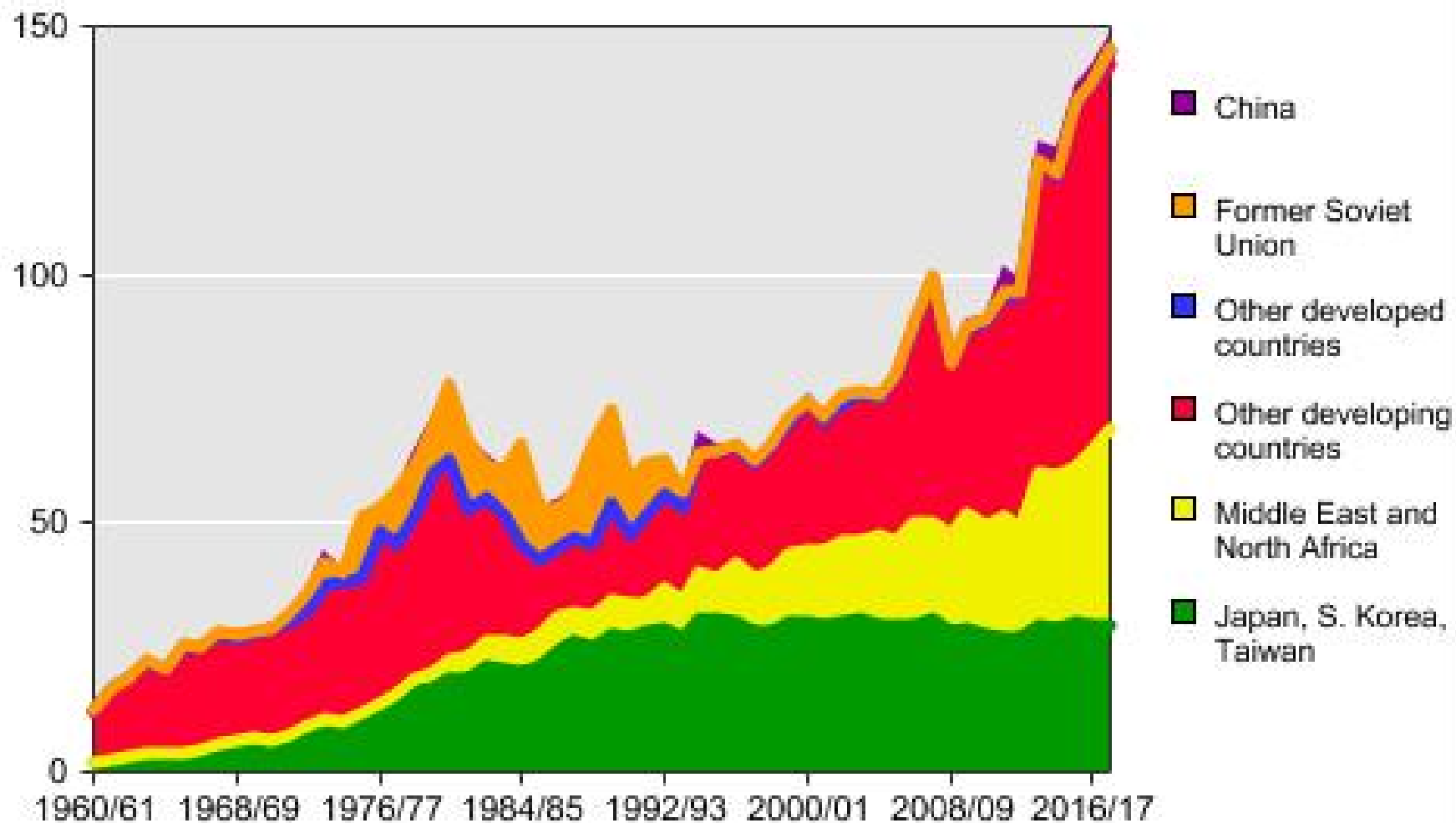
Million metric tons



Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution (PS&D) Database.
Updated: August 2017.

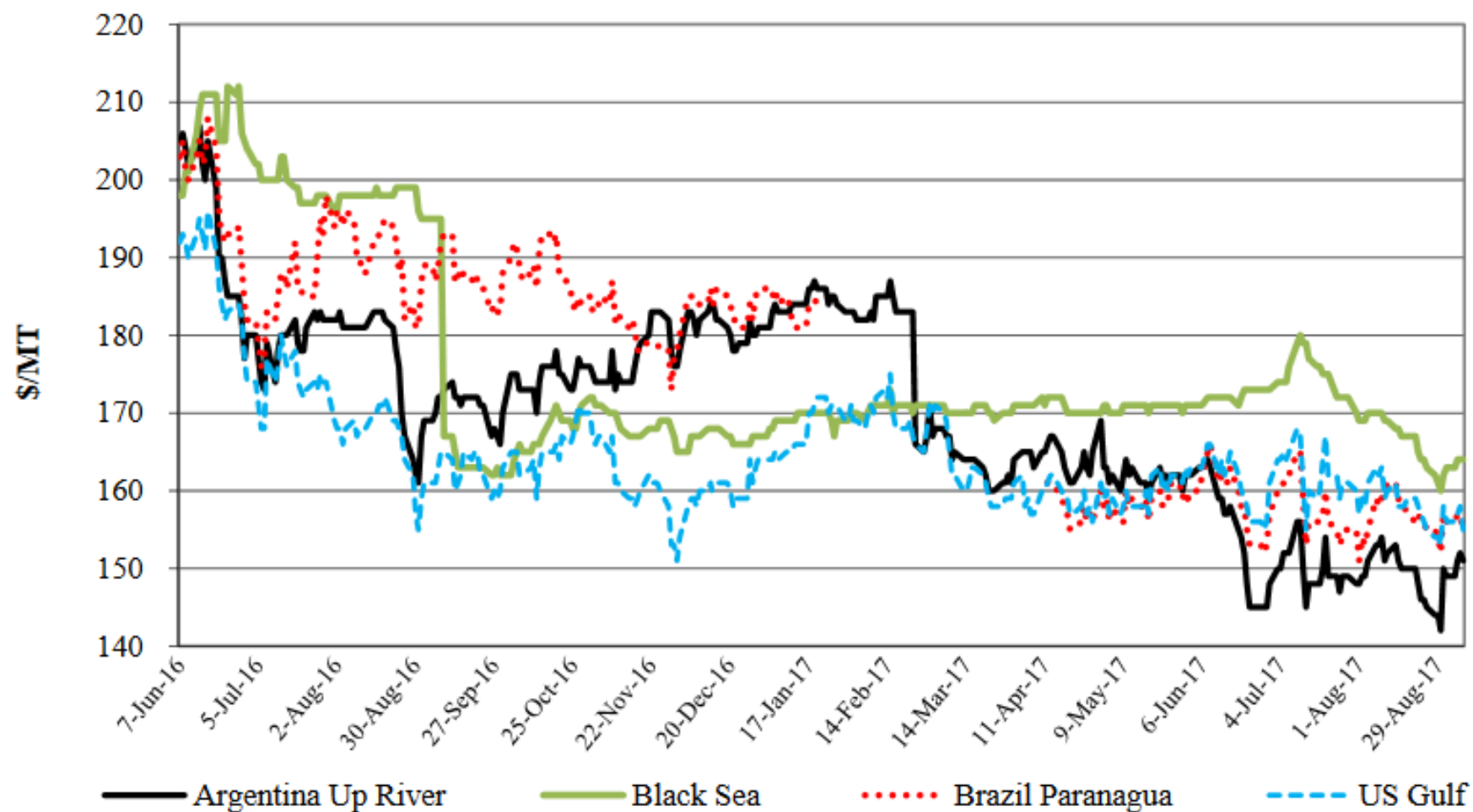
Leading world importers of corn

Million metric tons



Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution (PS&D) Database.
Updated: August 2017.

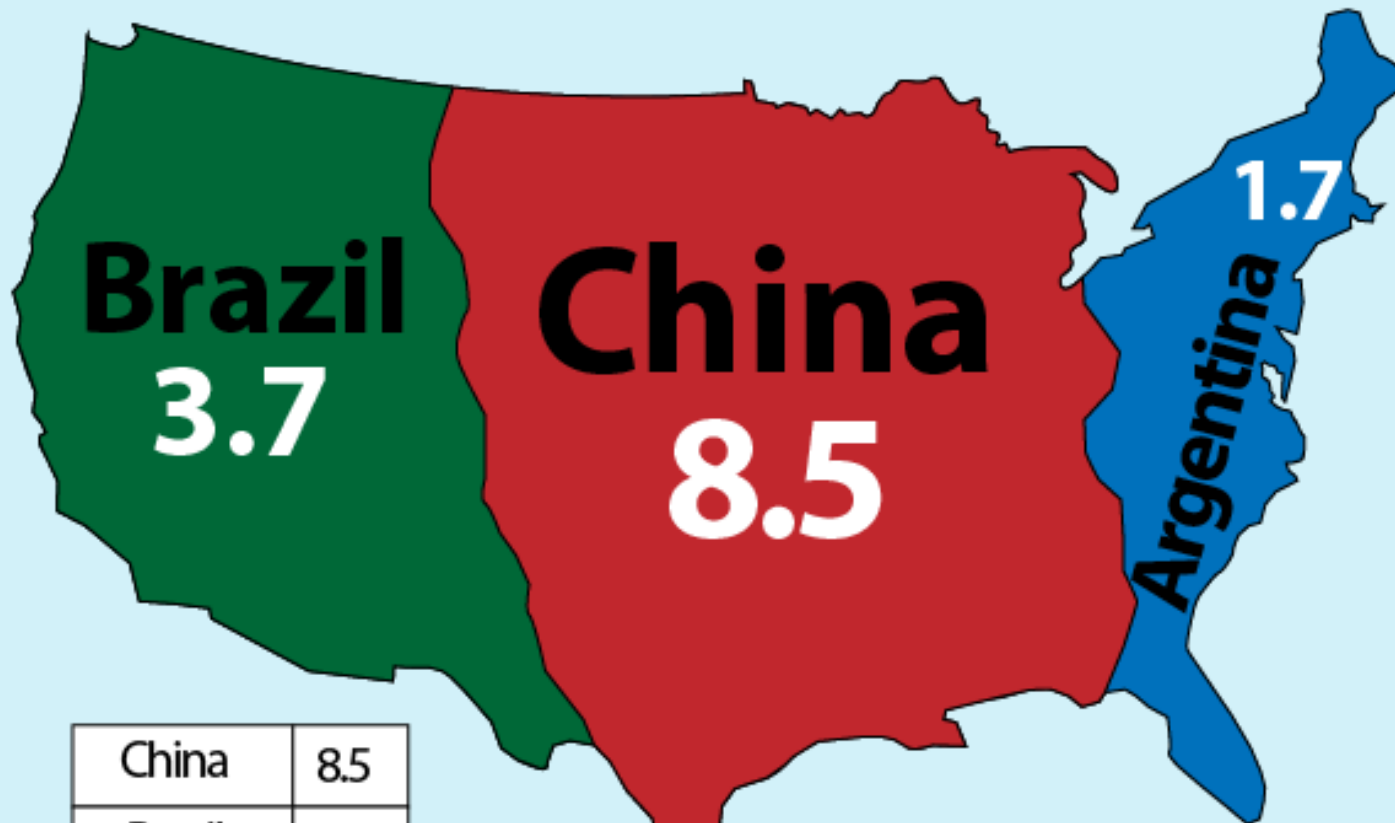
Corn Daily FOB Export Bids



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

2017 Corn Production

U.S. = Brazil, China, Argentina



China	8.5
Brazil	3.7
Argentina	1.7
Total	13.9

U.S.
14.2

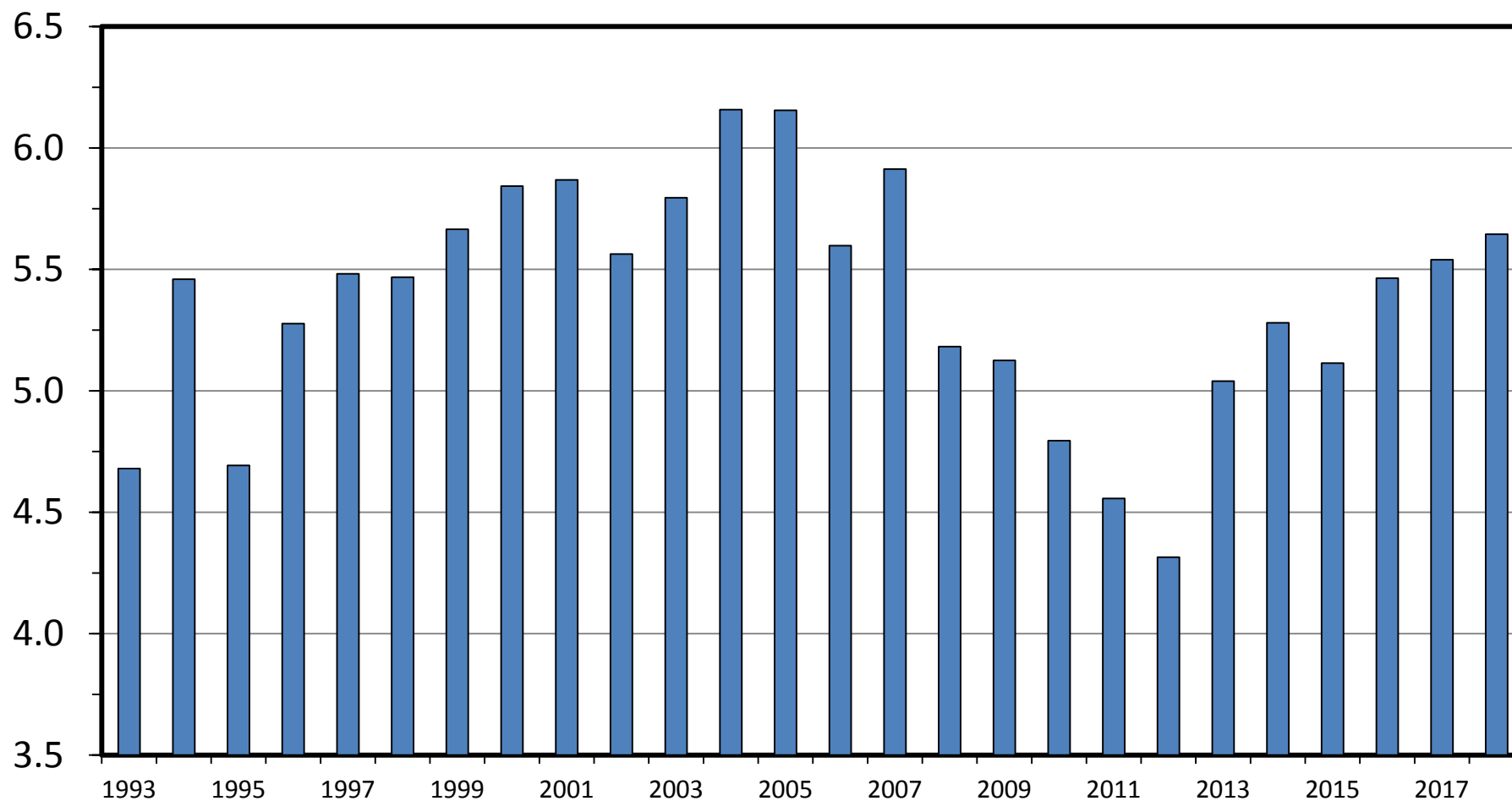


Source: USDA, FAS, PS&D

US ANNUAL CORN FEED USE & RESIDUAL

Crop Year

Bil. Bushels



Data Source: USDA-NASS, Forecasts by LMIC
Livestock Marketing Information Center

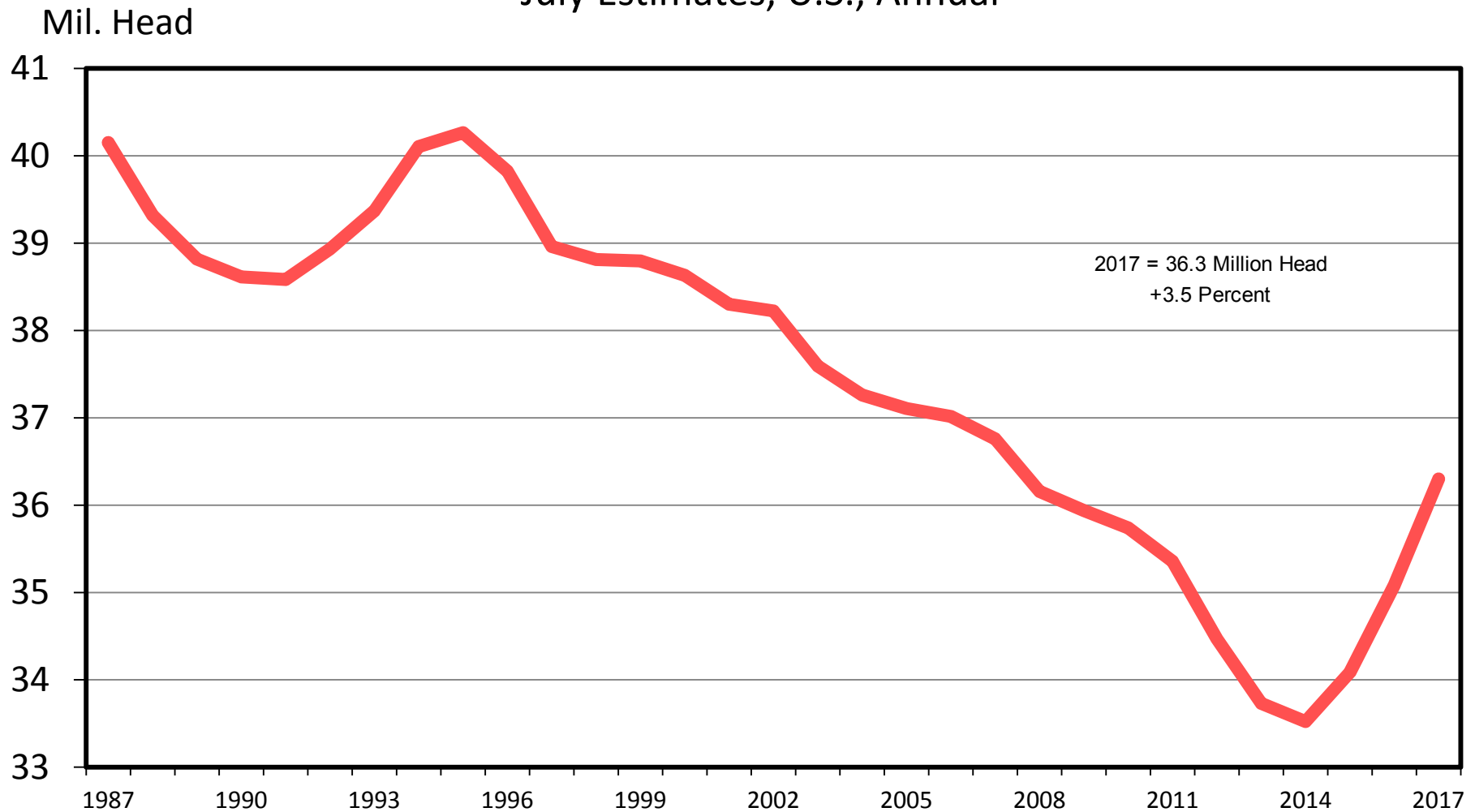


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

G-NP-06
11/11/17

CALF CROP

July Estimates, U.S., Annual



Data Source: USDA-NASS

Livestock Marketing Information Center

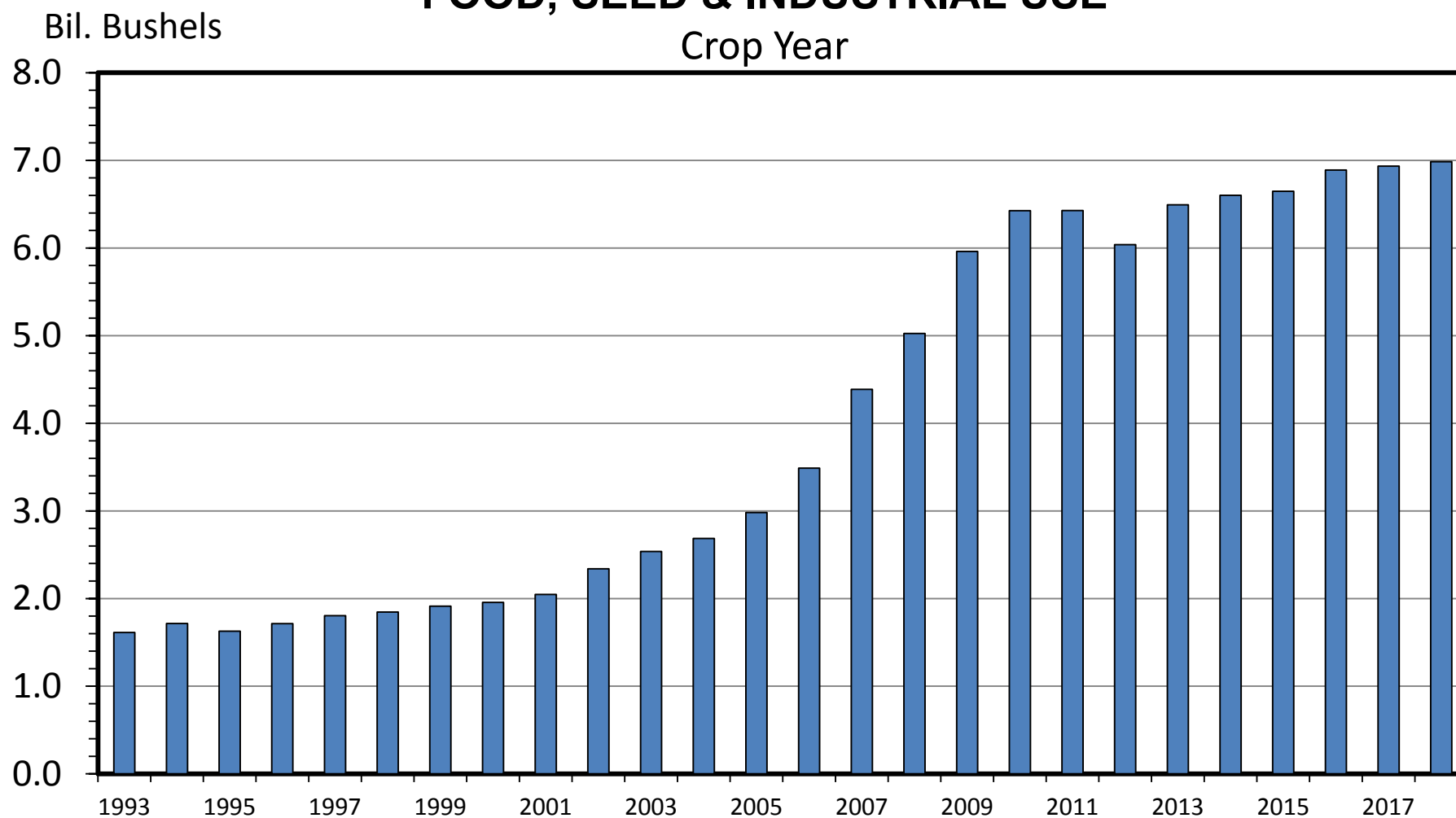


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

C-N-18B

08/13/17

US ANNUAL CORN FOOD, SEED & INDUSTRIAL USE



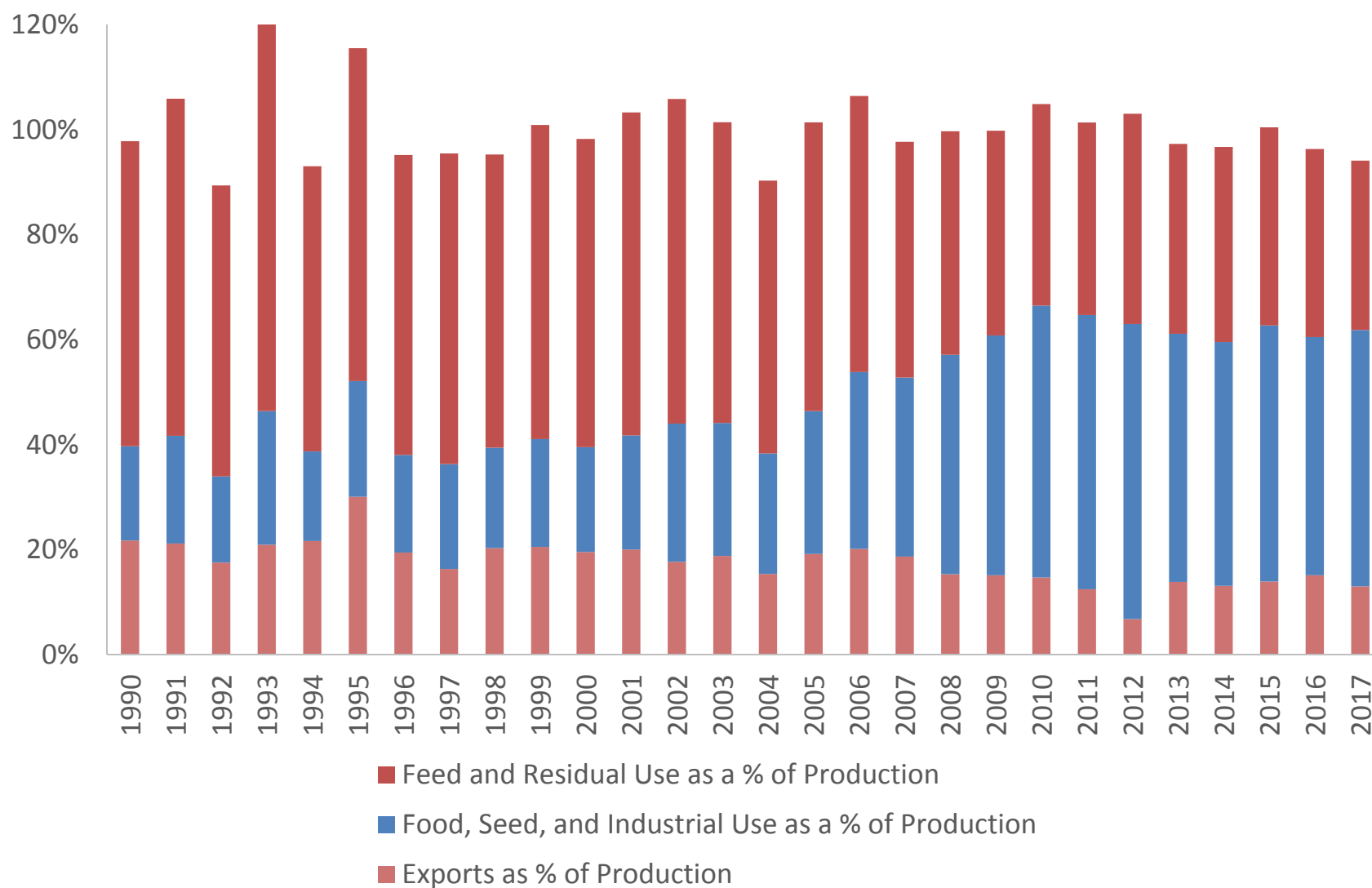
Data Source: USDA-NASS, Forecasts by LMIC
Livestock Marketing Information Center



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

G-NP-10
11/11/17

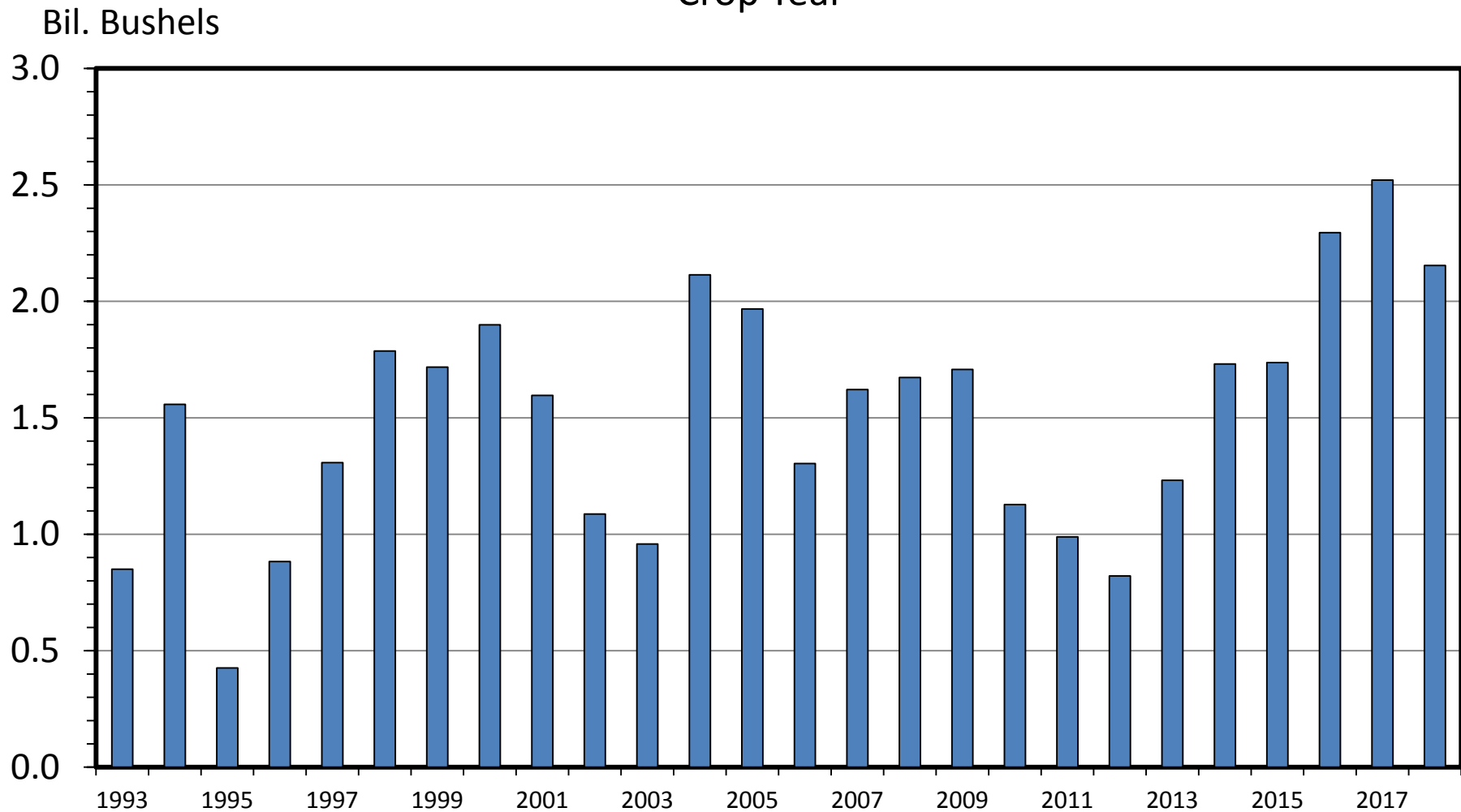
Corn Disappearance as % of Production



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

US ANNUAL CORN ENDING STOCKS

Crop Year



Data Source: USDA-NASS, Forecasts by LMIC
Livestock Marketing Information Center

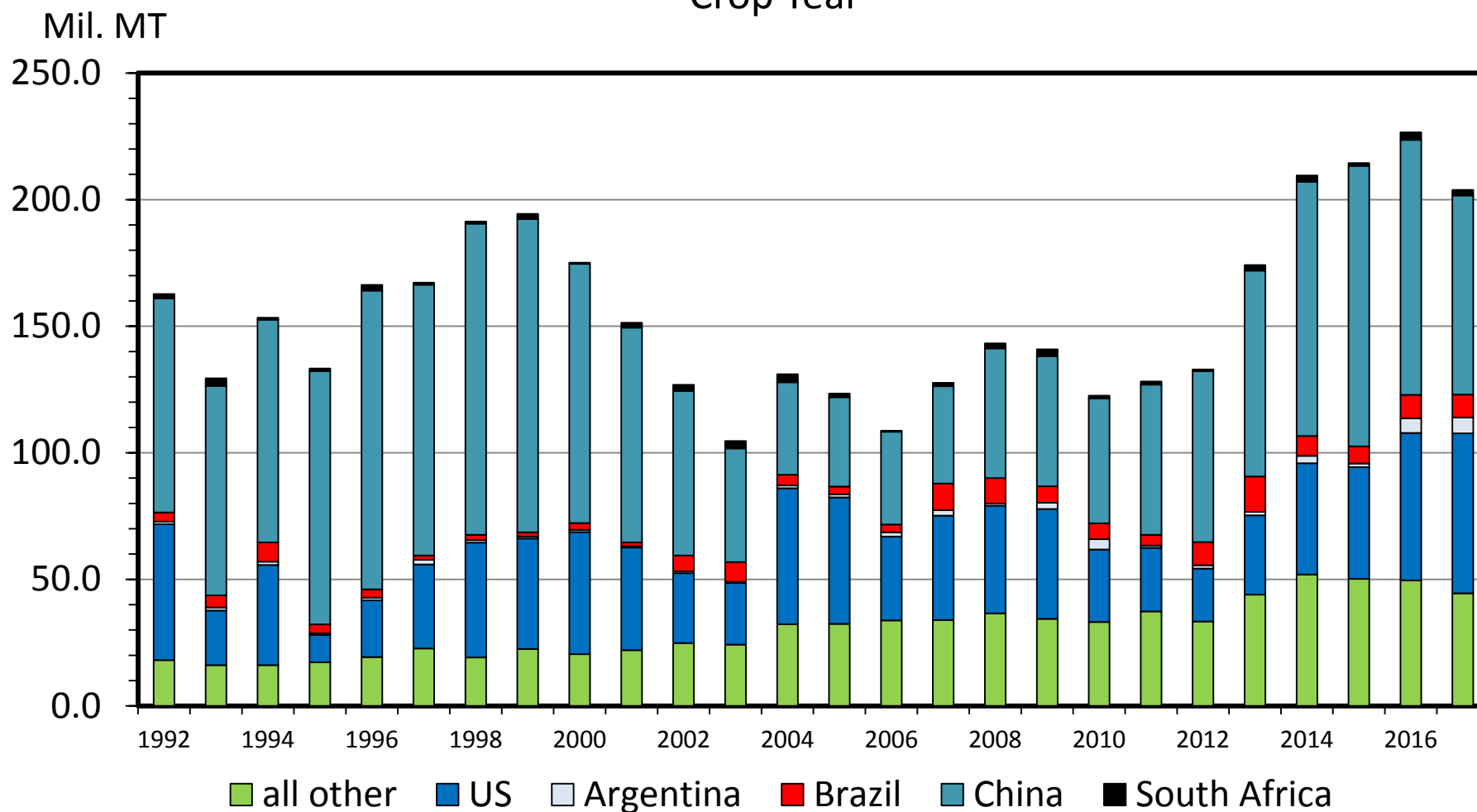


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

G-NP-09
11/11/17

WORLD CORN ENDING STOCKS

Crop Year



Data Source: USDA-FAS

Livestock Marketing Information Center

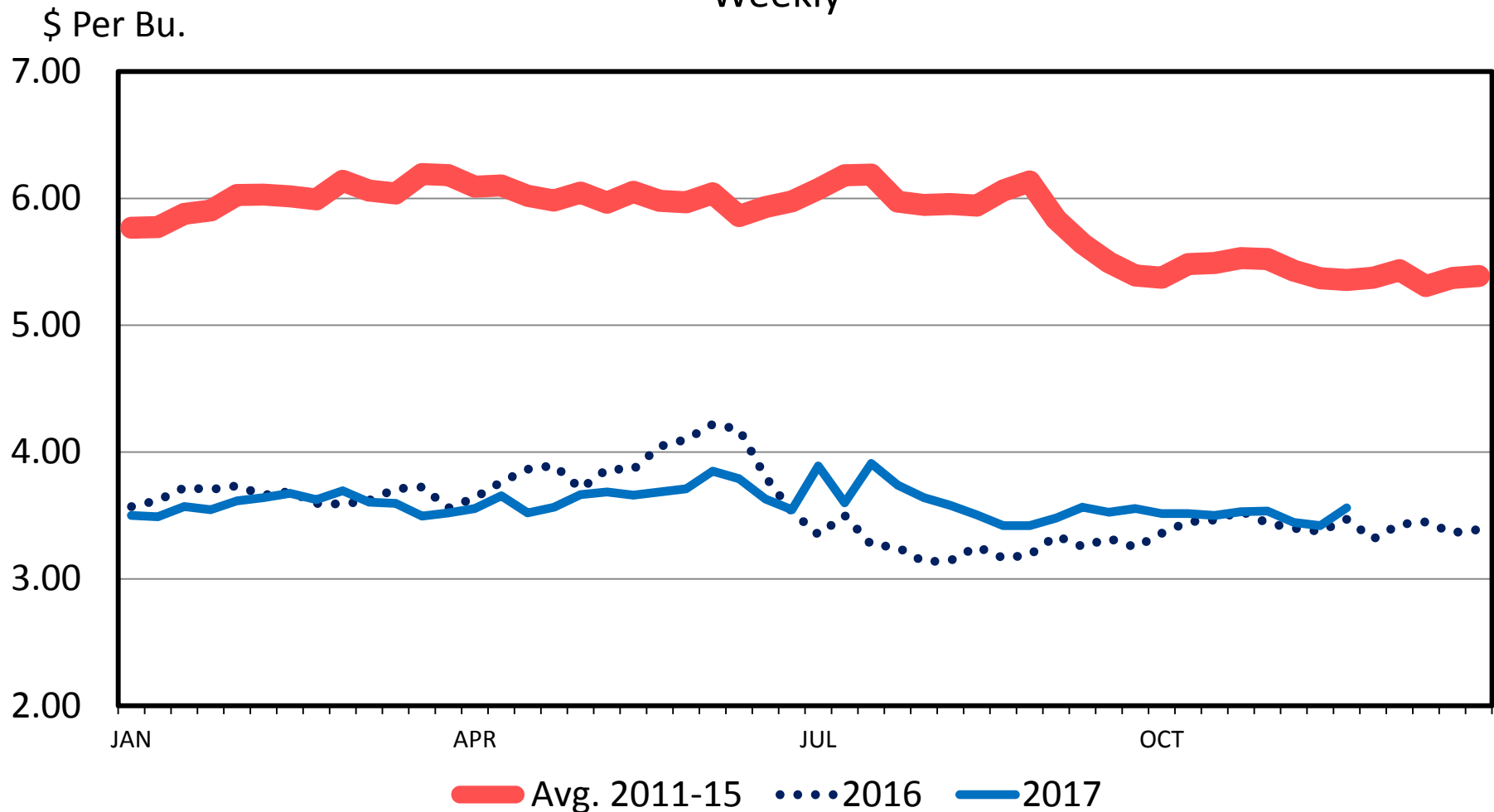


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

11/16/17

SOUTHERN PLAINS CORN PRICES

Weekly



Data Source: USDA-AMS

Livestock Marketing Information Center



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

G-P-04
11/27/17

Maize		J	F	M	A	M	J	J	A	S	O	N	D
US (35%)				Planting		☑	☑	☑	Harvest				
China (22%)	north			Planting		☑	☑	Harvest					
	south		Planting		☑	☑	Harvest						
Brazil (8%)	1st crop	☑	☑	Harvest						Planting		☑	
	2nd crop	Planting		☑	☑		Harvest						
EU (7%)				Planting		☑	☑	☑	Harvest				
Argentina (3%)			Harvest						Planting		☑	☑	



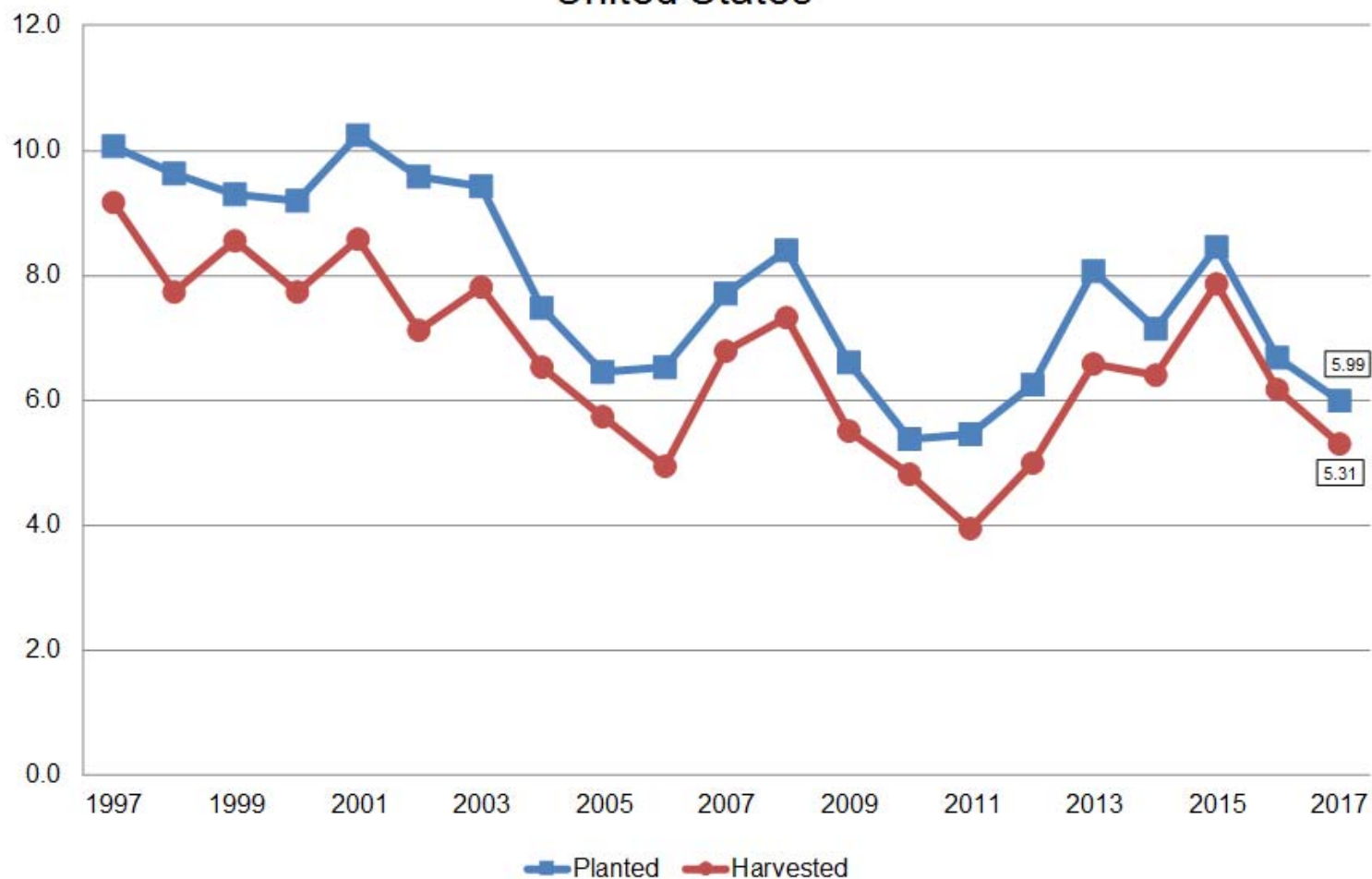
Sorghum





Sorghum Acres United States

Million Acres



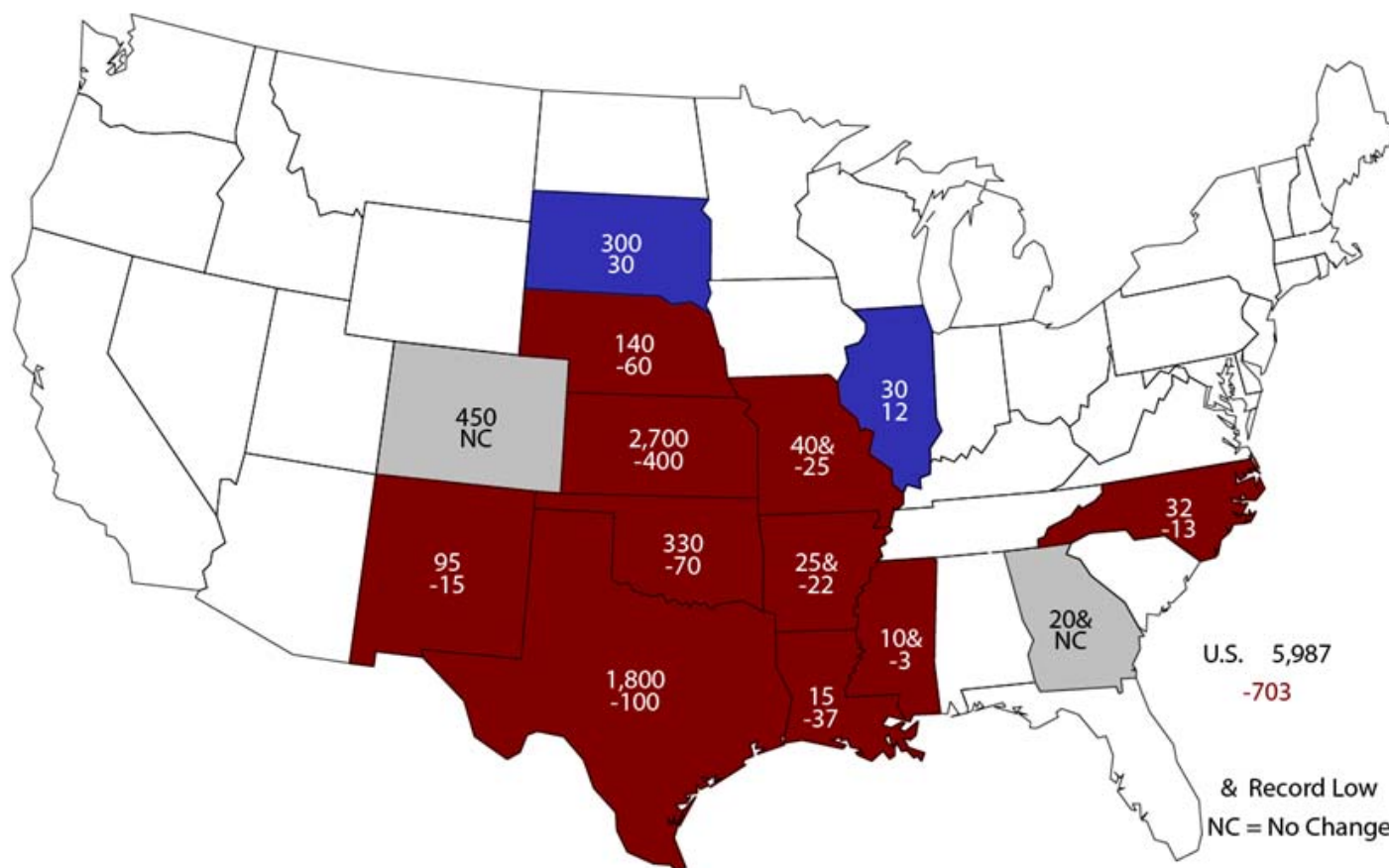
USDA-NASS
6-30-17



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



2017 Sorghum Planted Area (000) Acres and Change From Previous Year



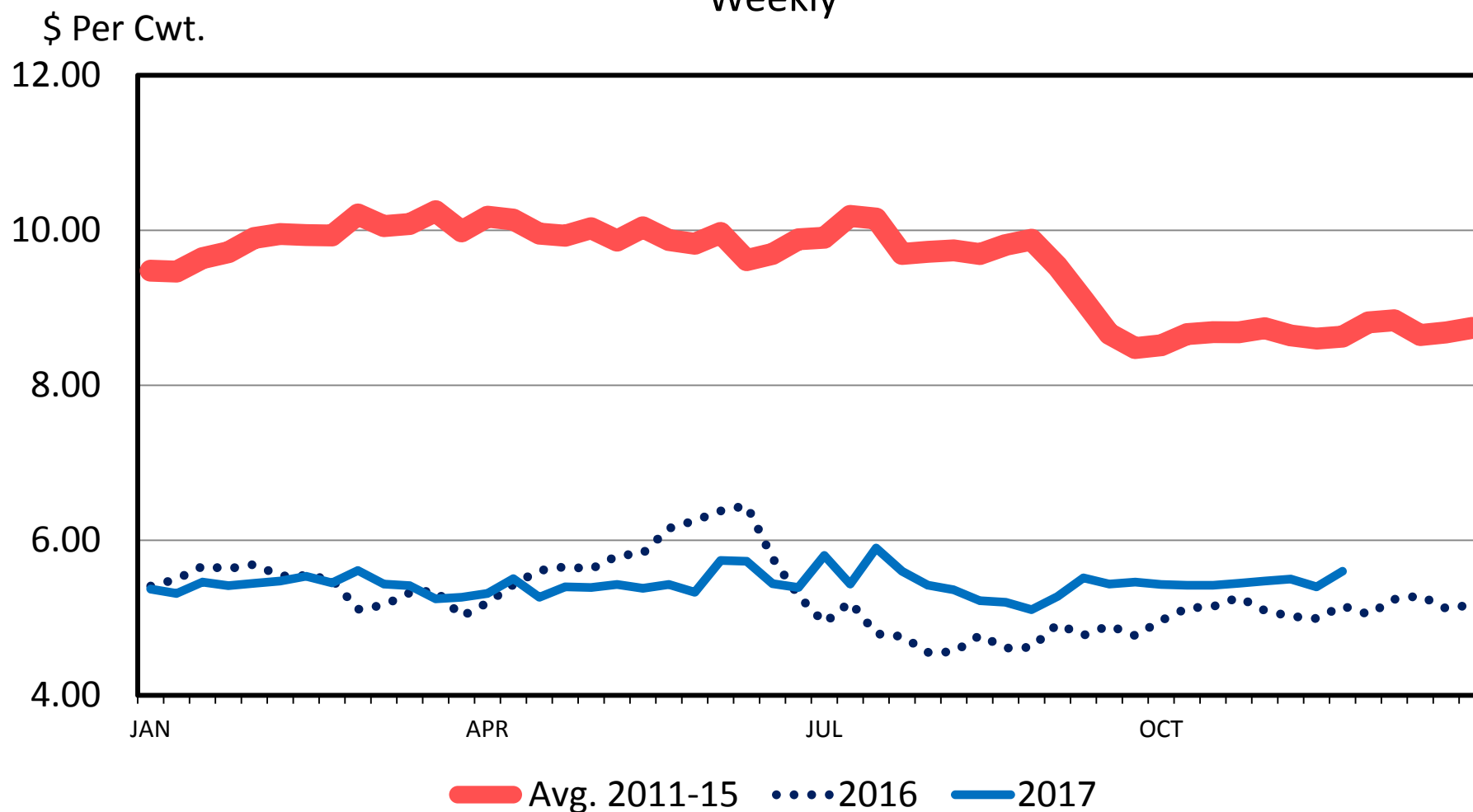
USDA-NASS
6-30-17



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

SOUTHERN PLAINS SORGHUM PRICES

Weekly



Data Source: USDA-AMS

Livestock Marketing Information Center



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

G-P-05
11/27/17

Soybeans

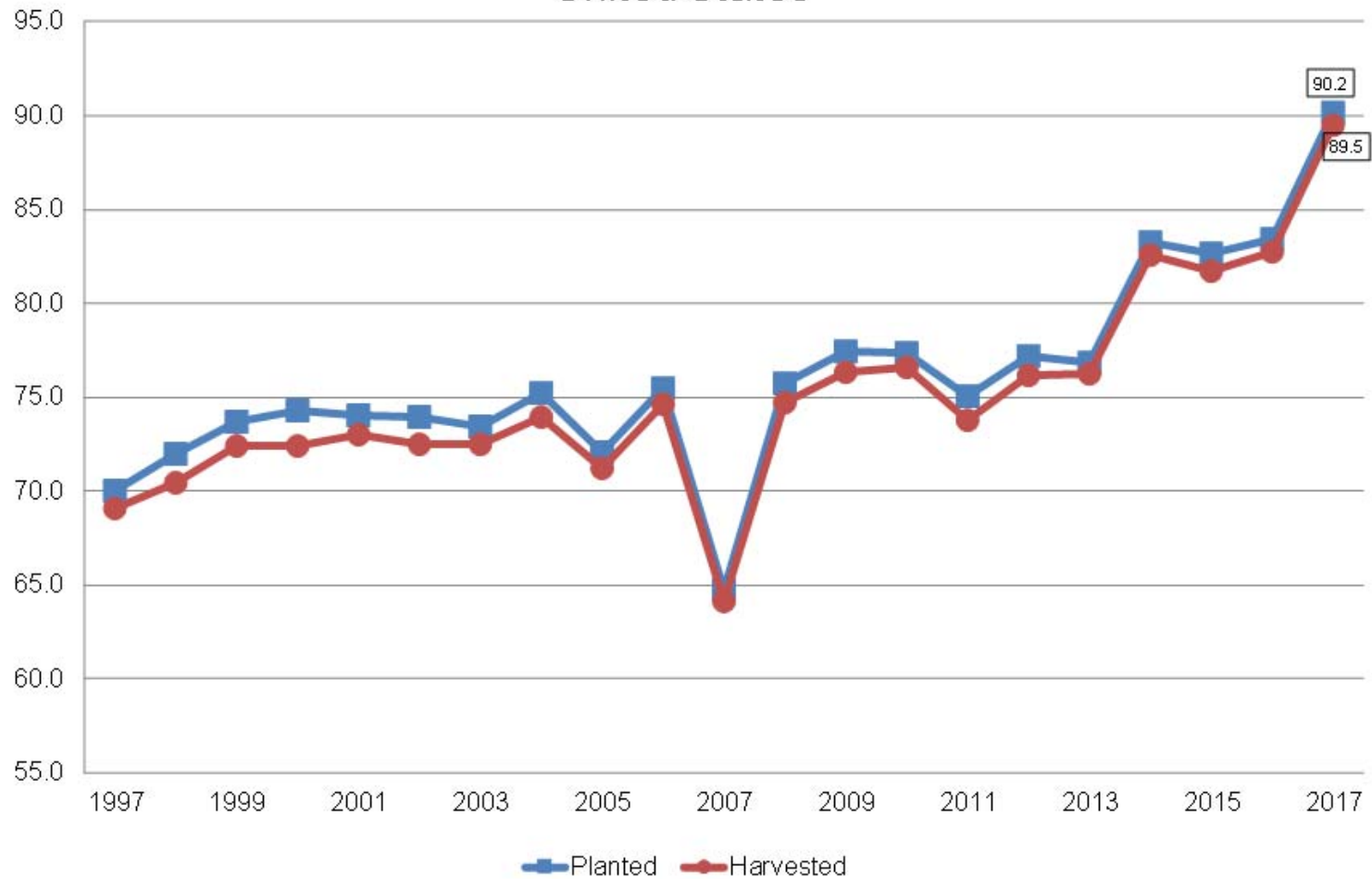


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



Soybean Acres United States

Million Acres



USDA-NASS
10-12-17



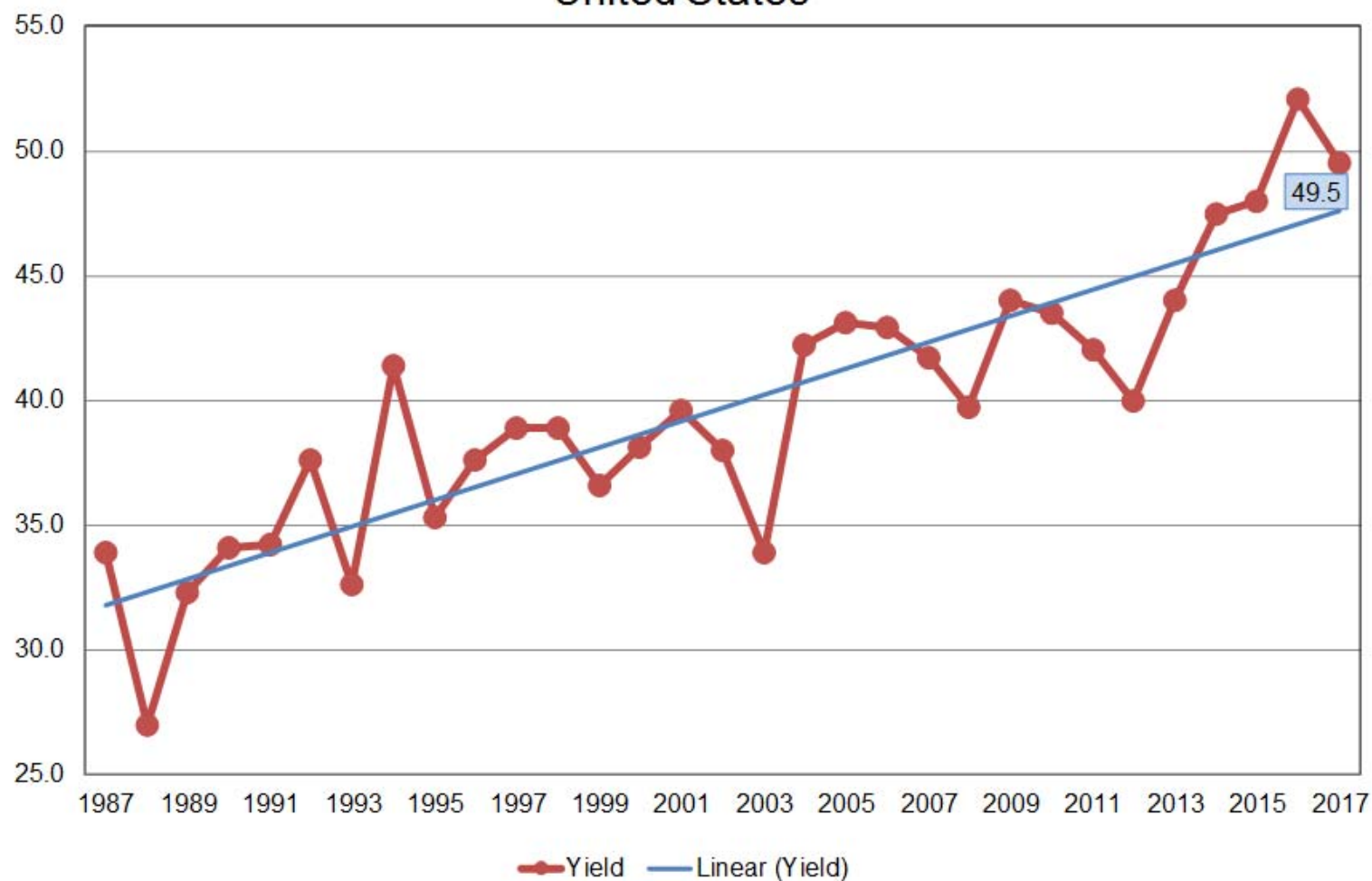
MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Source: USDA NASS



Soybean Yield United States

Bushels per Acre



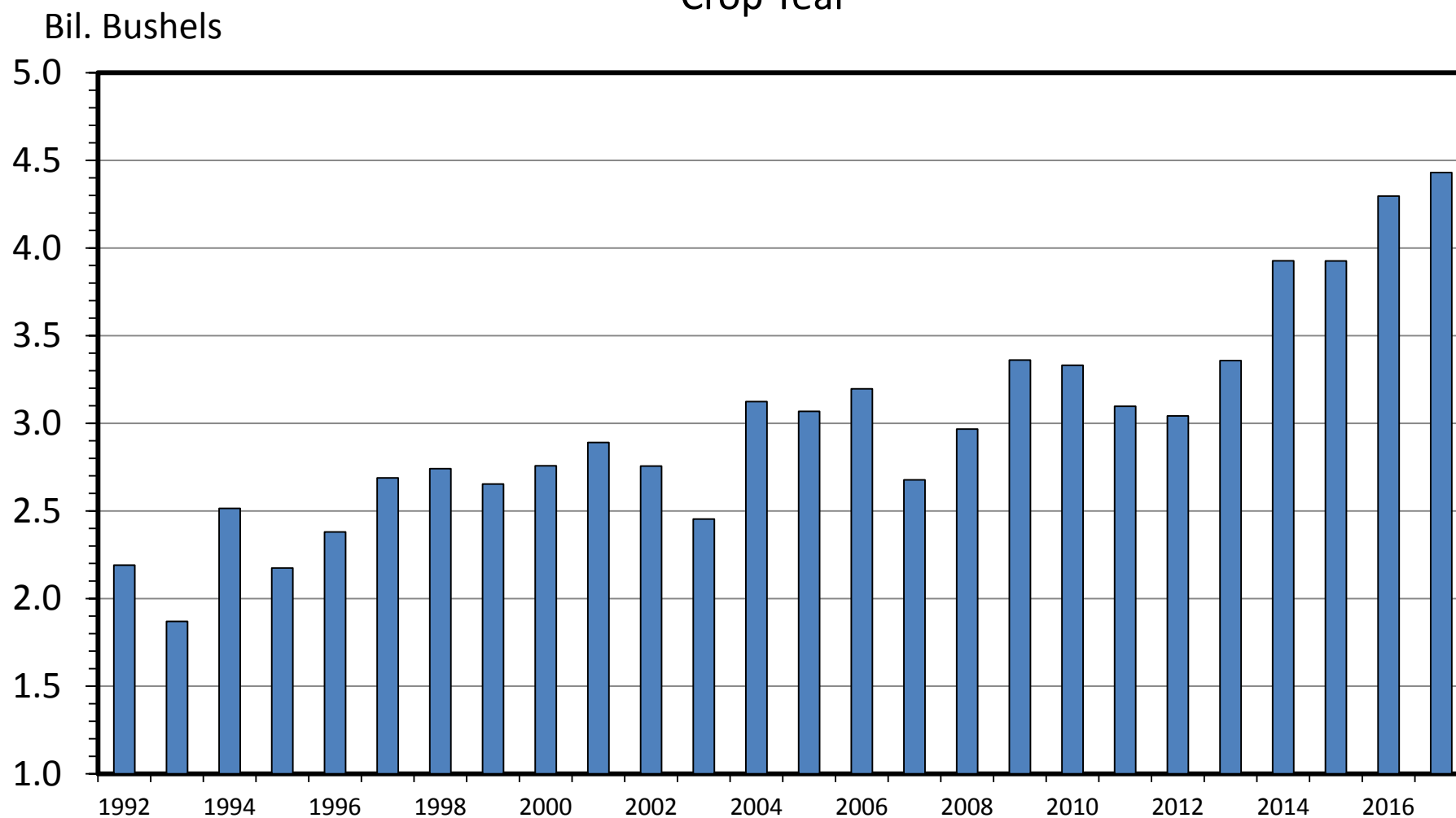
USDA-NASS
11-9-17



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

US ANNUAL SOYBEAN PRODUCTION

Crop Year



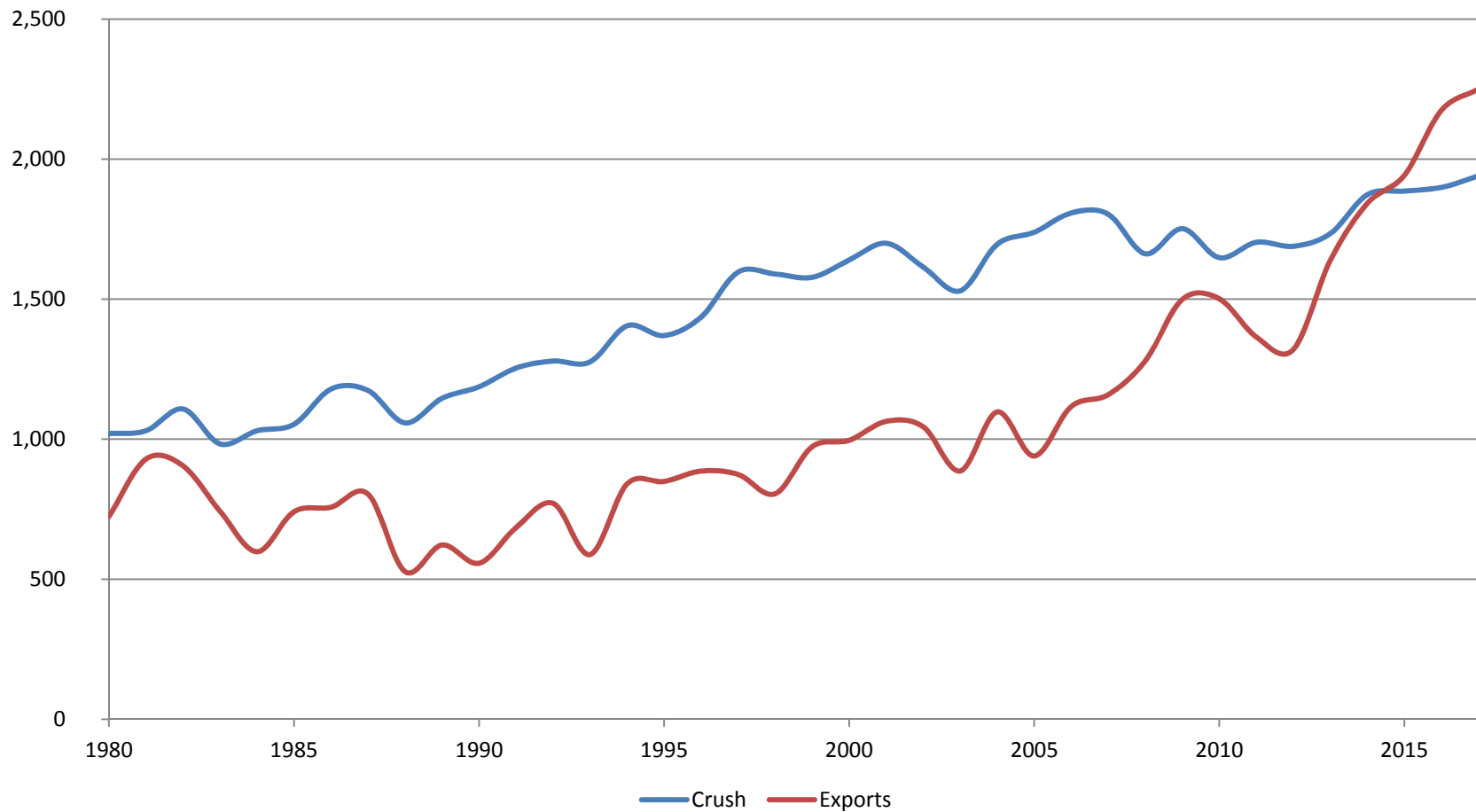
Data Source: USDA-NASS, Forecasts by LMIC
Livestock Marketing Information Center



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

G-NP-17
10/19/17

Soybean Disappearance (Million bu)

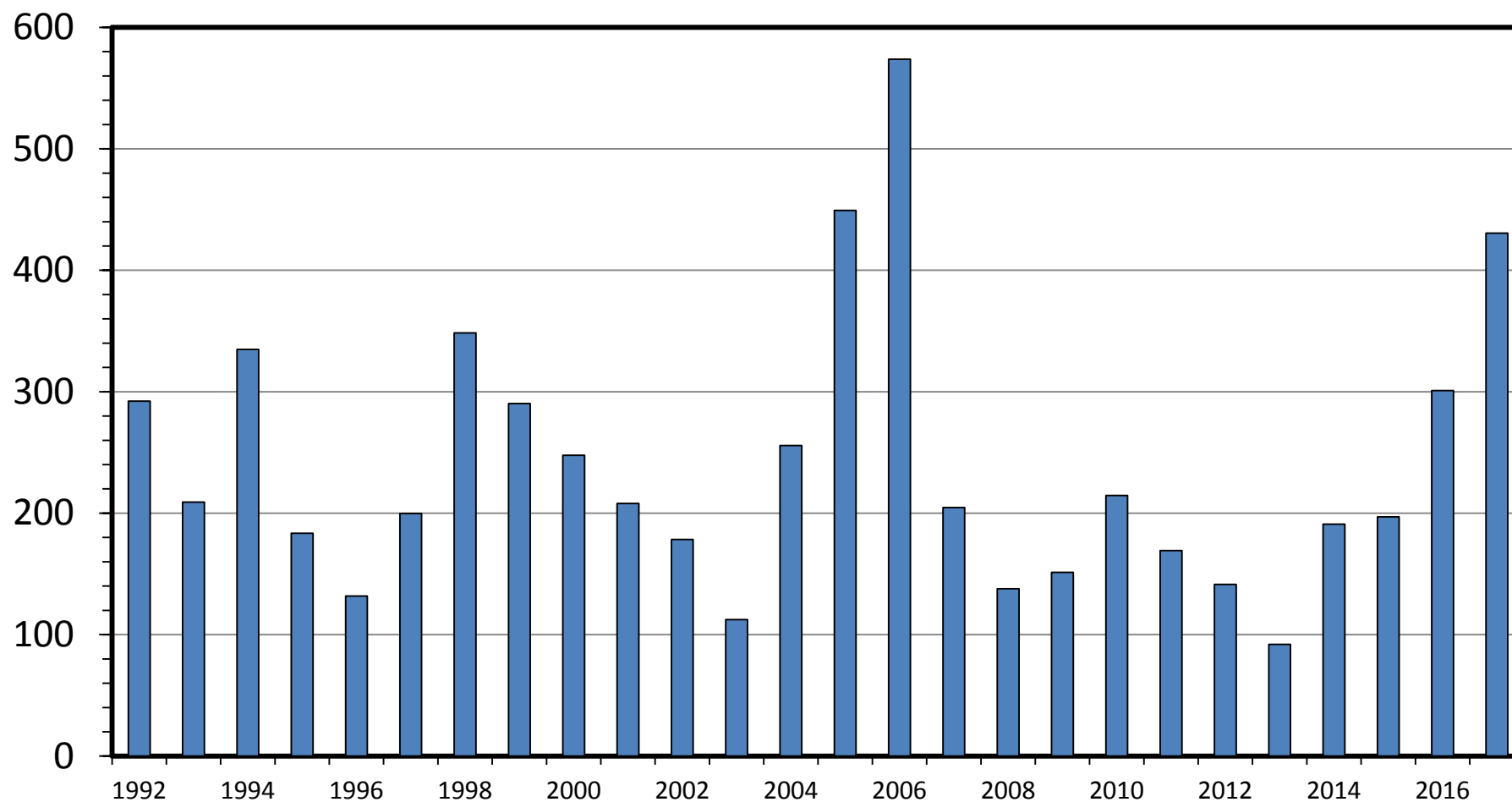


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

US ANNUAL SOYBEAN ENDING STOCKS

Crop Year

Mil. Bushels



Data Source: USDA-NASS, Forecasts by LMIC
Livestock Marketing Information Center

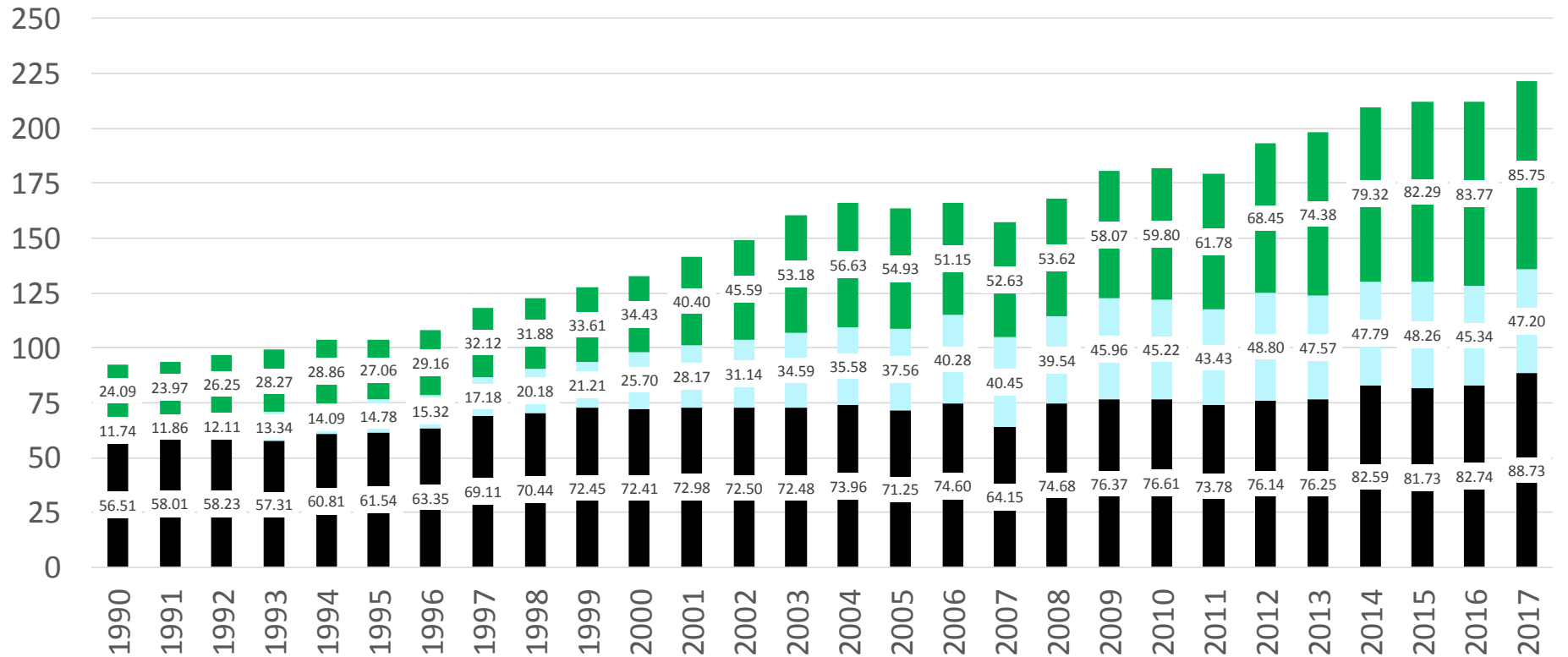


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

G-NP-18
10/19/17

Harvested Area (Million Acres) for U.S., Argentina and Brazil from 1990-2017

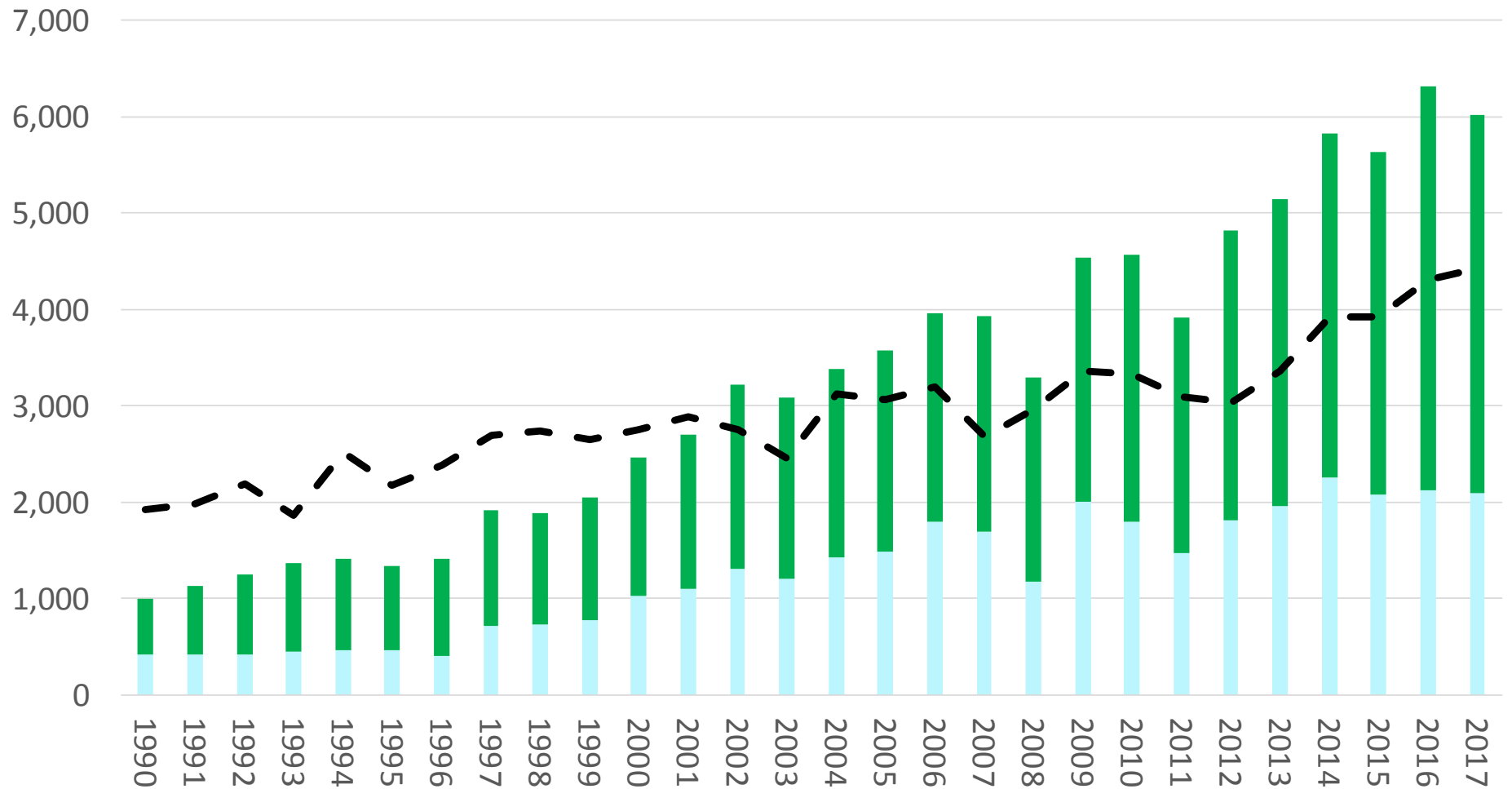
■ U.S. ■ Argentina ■ Brazil



MISSISSIPPI STATE
UNIVERSITY™
Department of Agricultural Economics

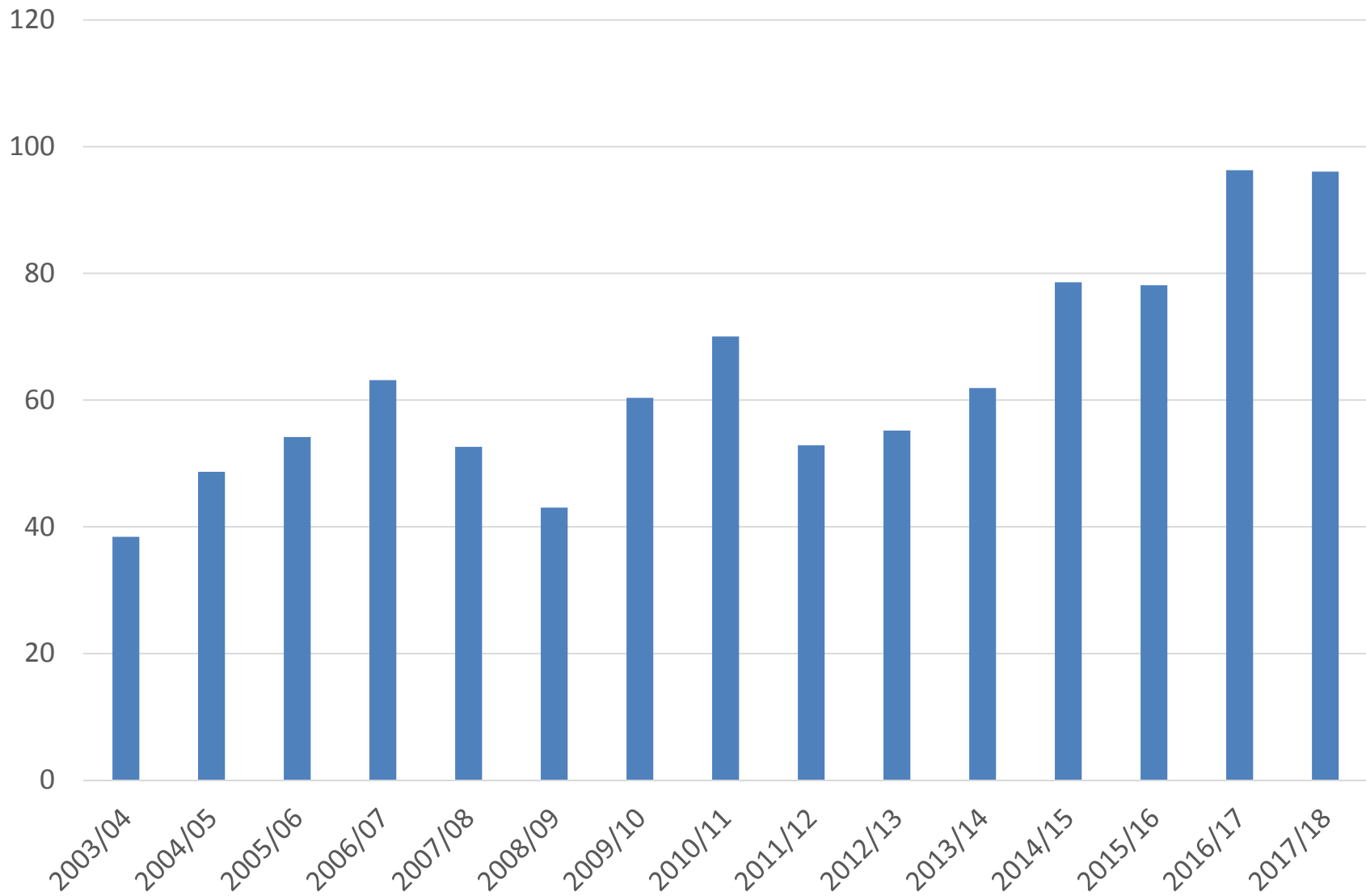
Soybean Production (Million Bushels) for U.S., ARG, BRZ from 1990-2017(F)

ARG BRZ US



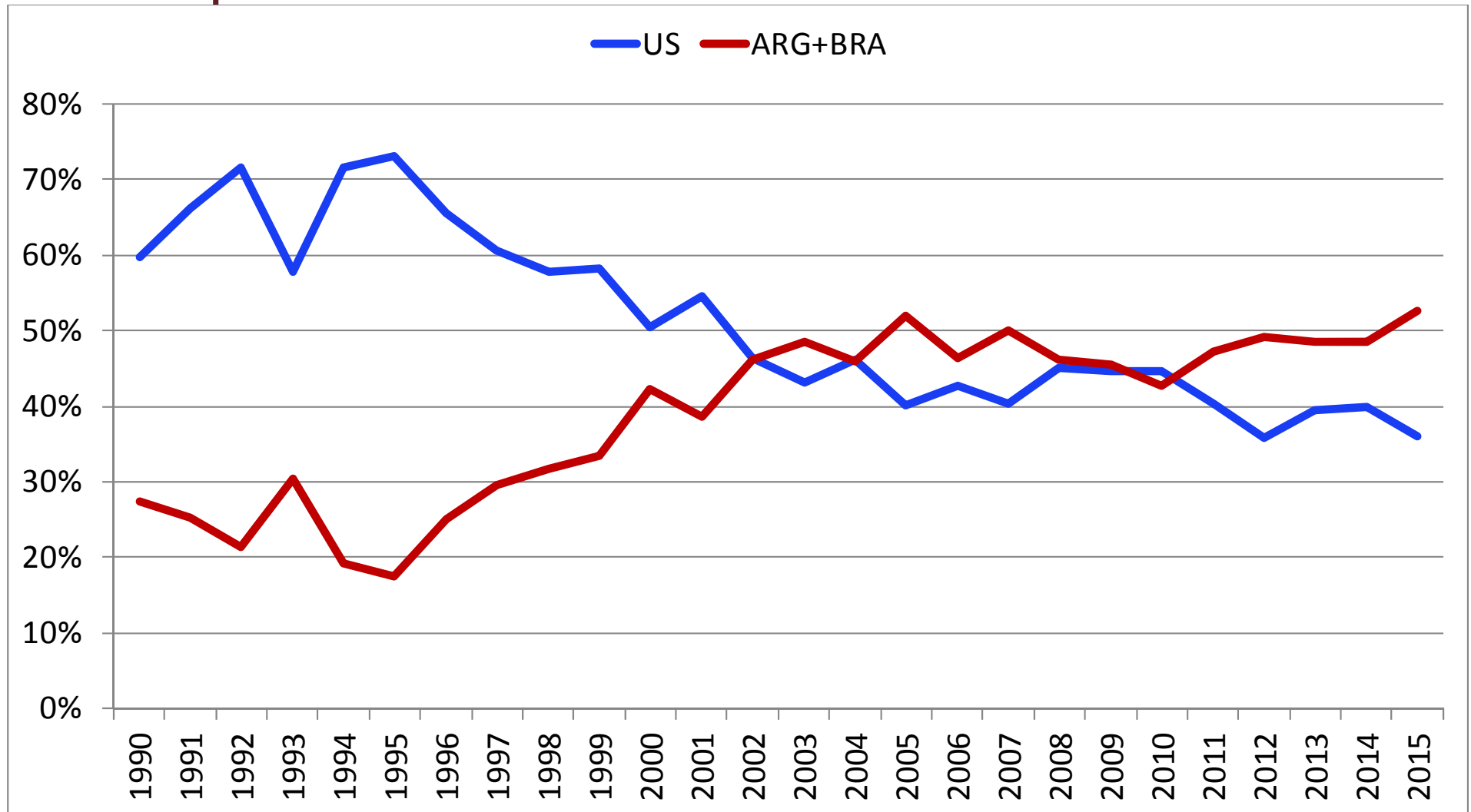
MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

World Soybean Ending Stocks (Million Metric Tons)



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

US and South American Soybean Export Share

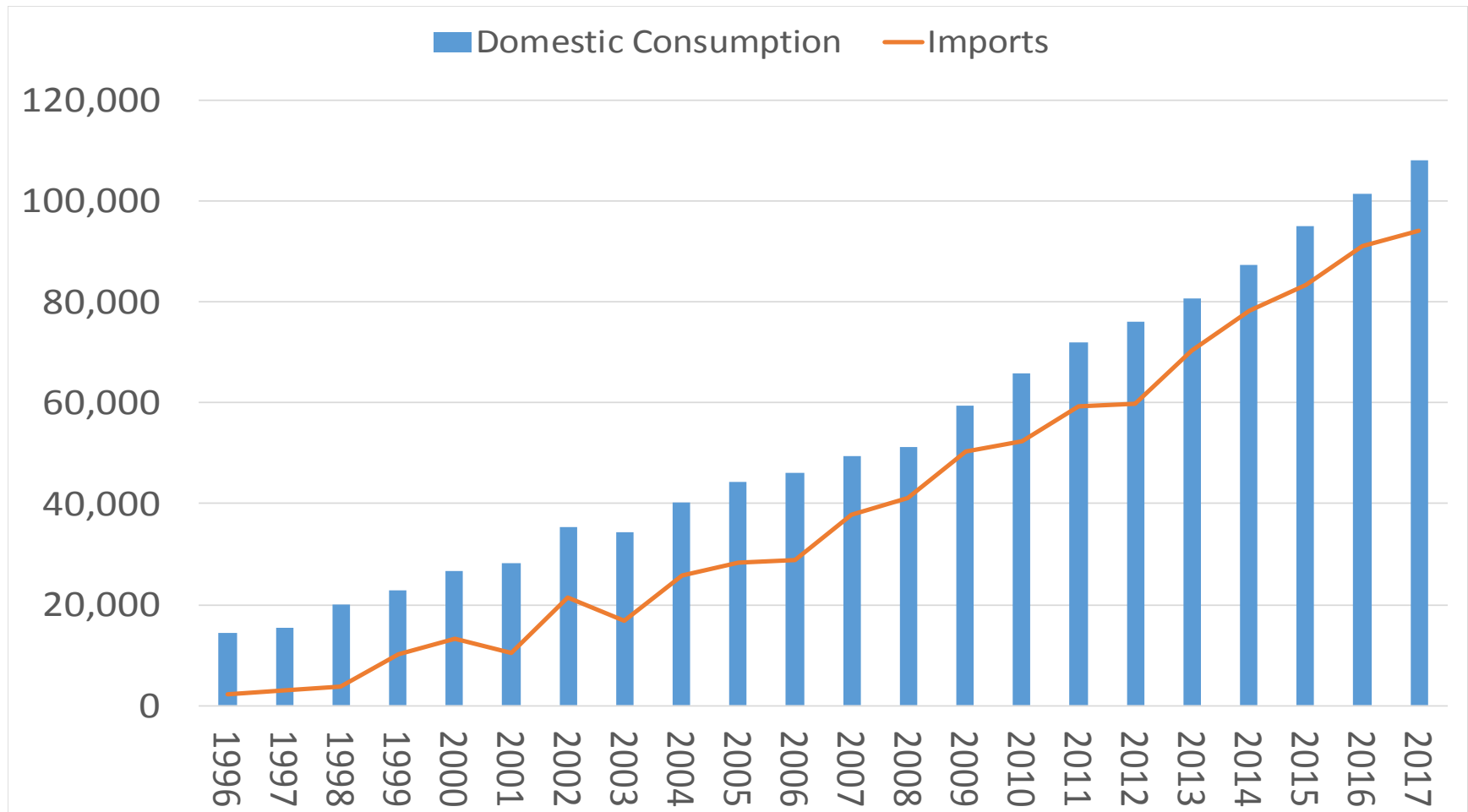


Source: USDA-FAS



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

China's Soybean Domestic Consumption and Imports (all sources) (MMT)



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Winter Wheat

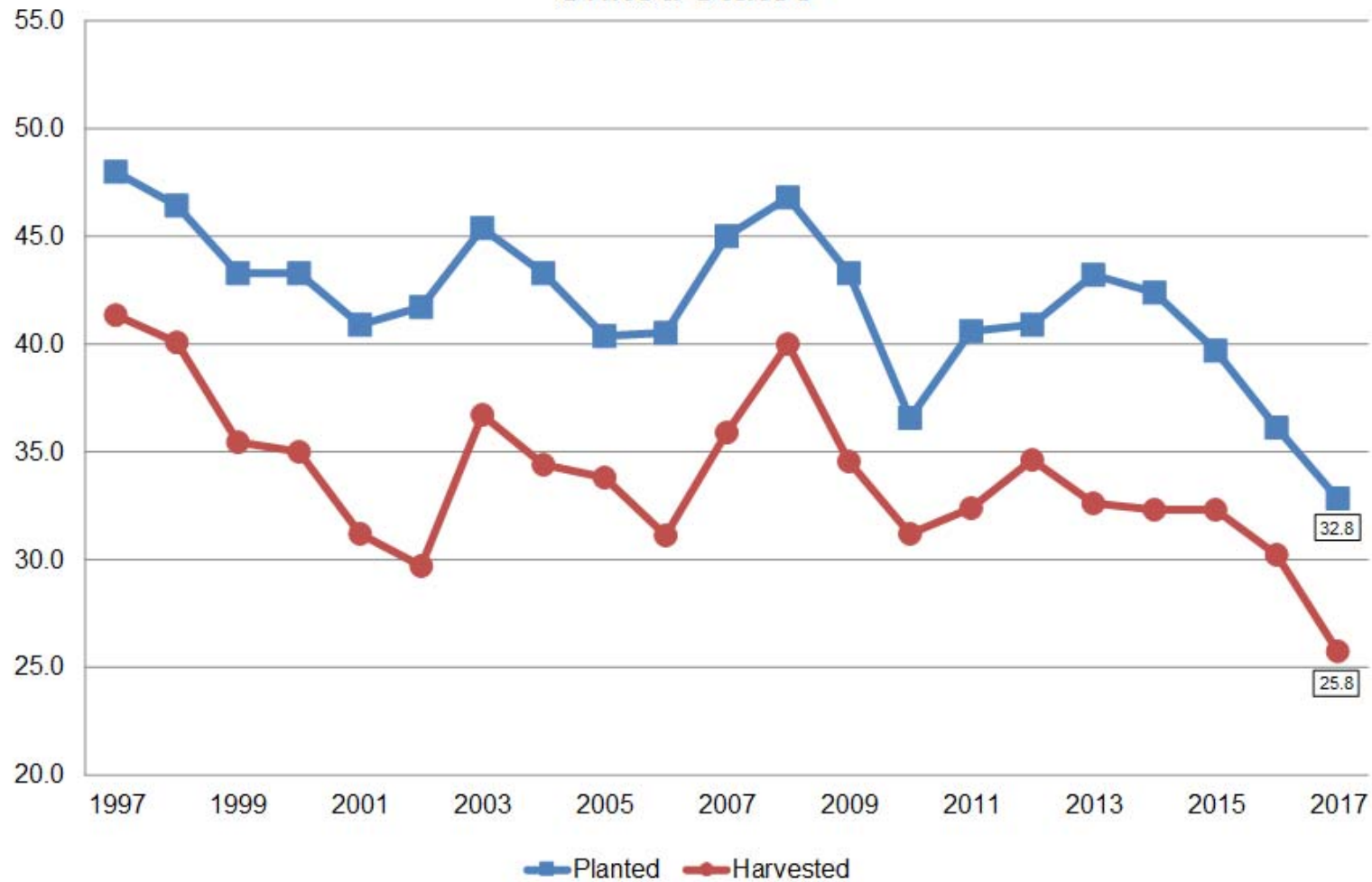


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



Winter Wheat Acres United States

Million Acres



USDA-NASS
7-12-17

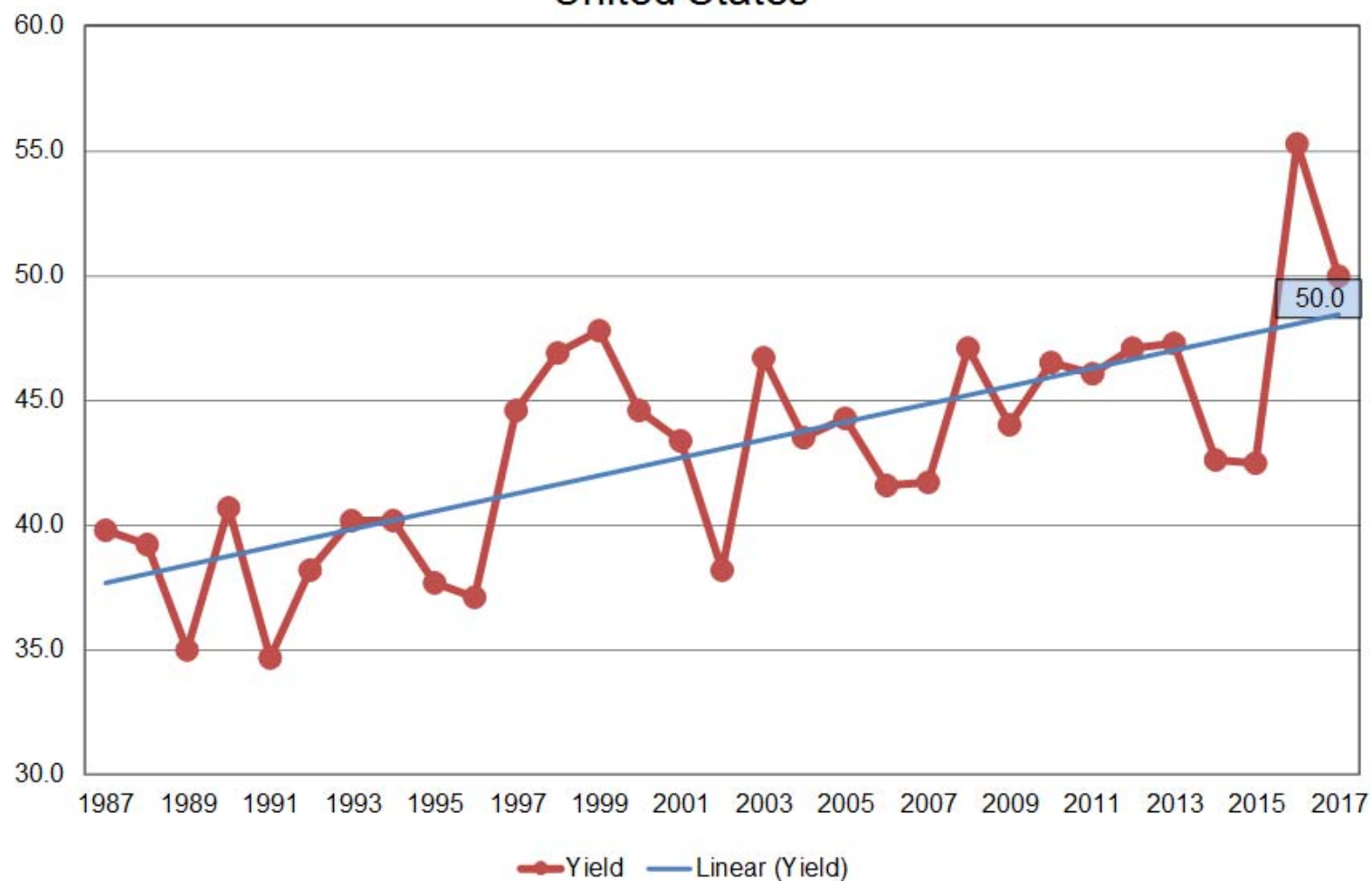


MISSISSIPPI STATE
UNIVERSITY™
Department of Agricultural Economics



Winter Wheat Yield United States

Bushels per Acre



USDA-NASS
8-10-17



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



Winter Wheat Production United States

Billion Bushels



USDA-NASS
8-10-17

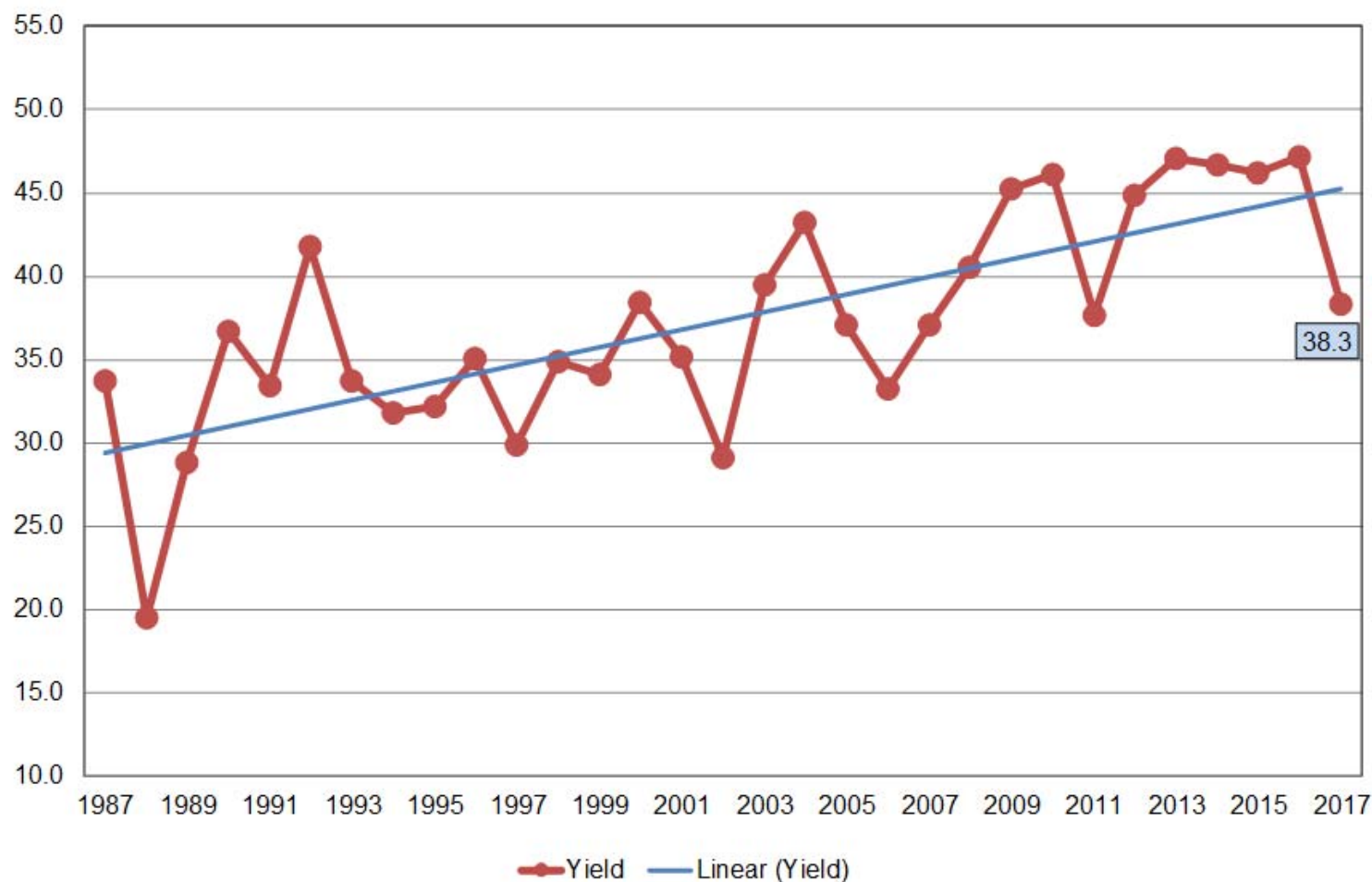


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



Other Spring Wheat Yield United States

Bushels per Acre



USDA-NASS
8-10-17

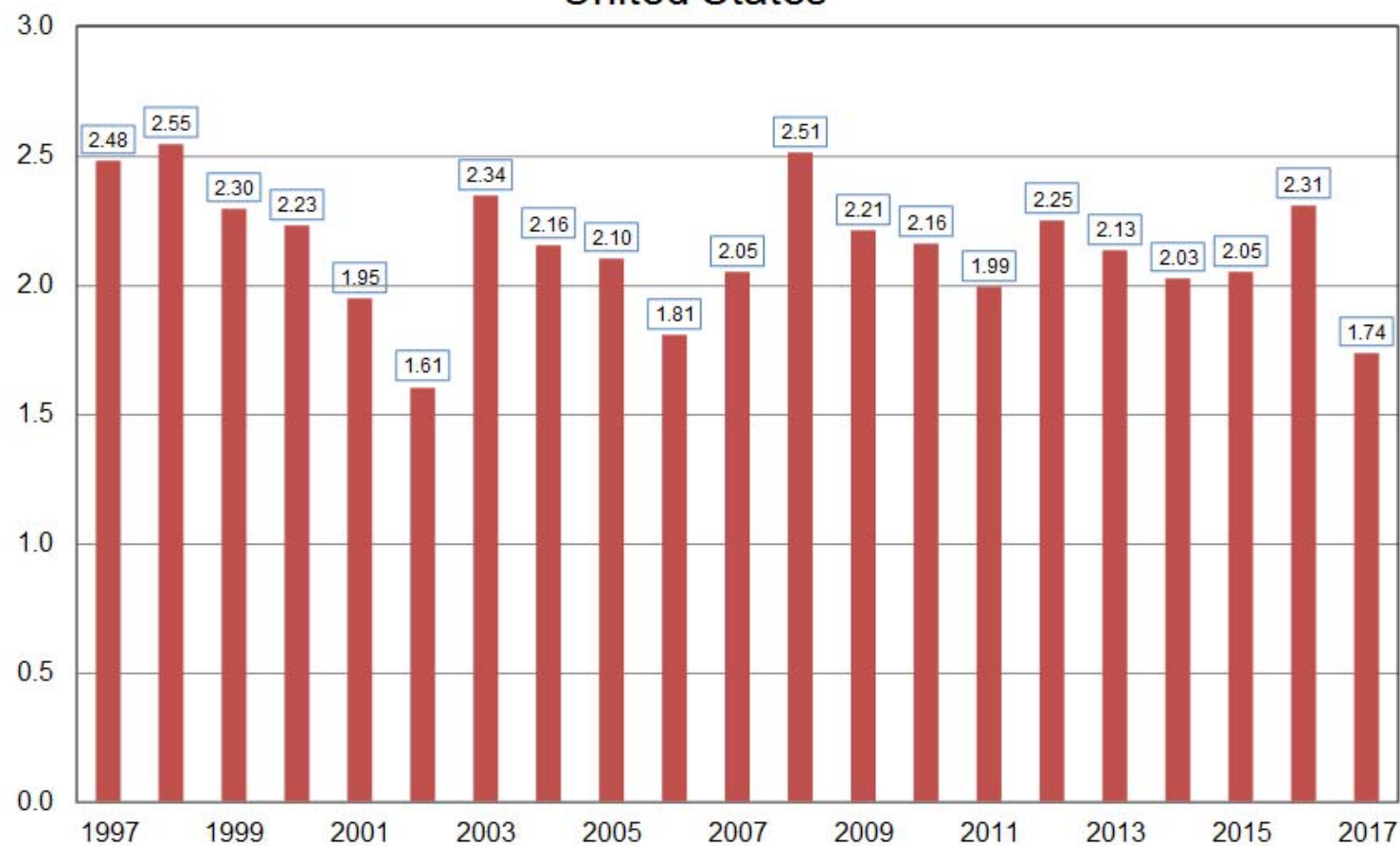


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



All Wheat Production United States

Billion Bushels

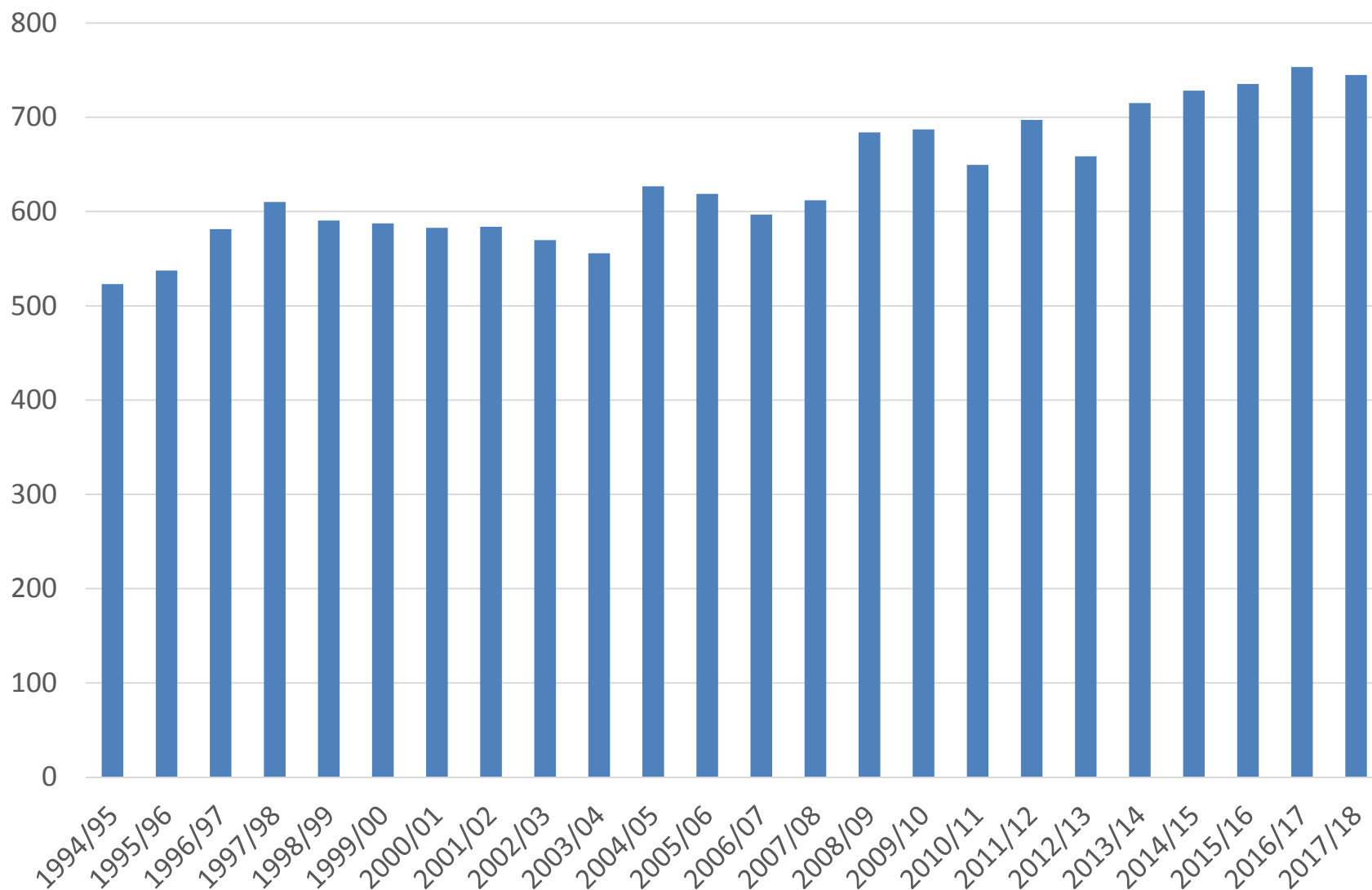


USDA-NASS
8-10-17



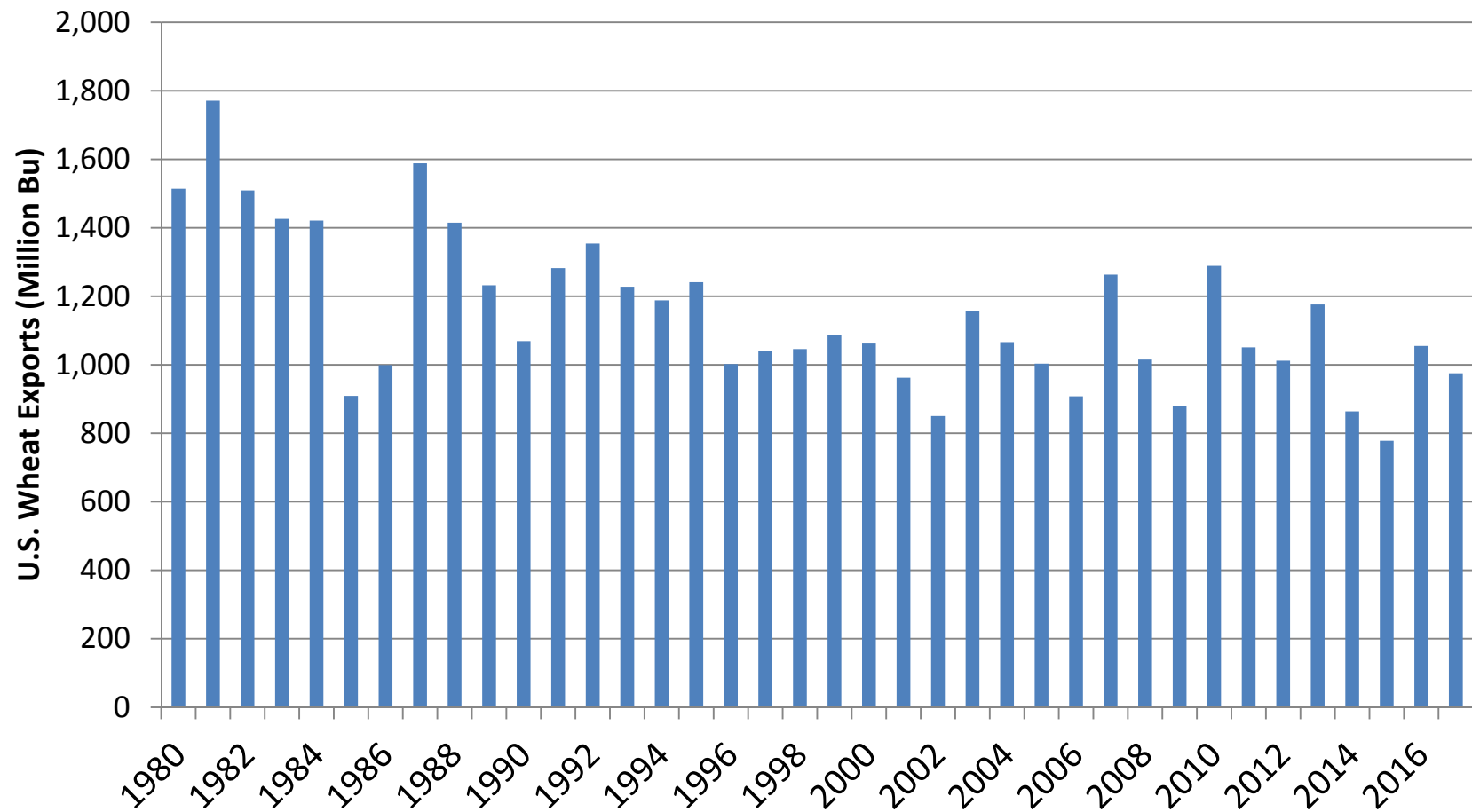
MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Global Wheat Production (Million Metric Tons)



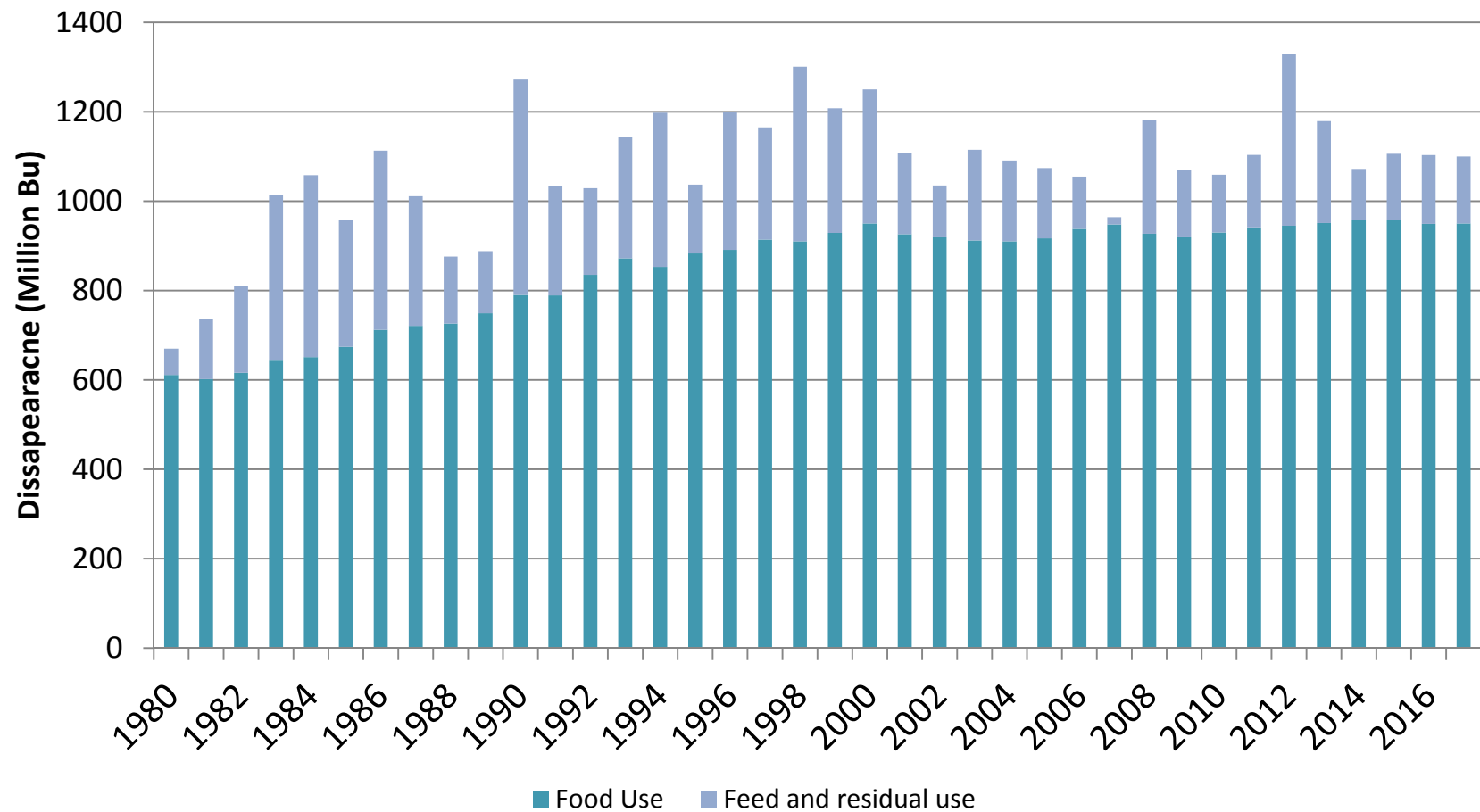
MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

U.S. Wheat Exports



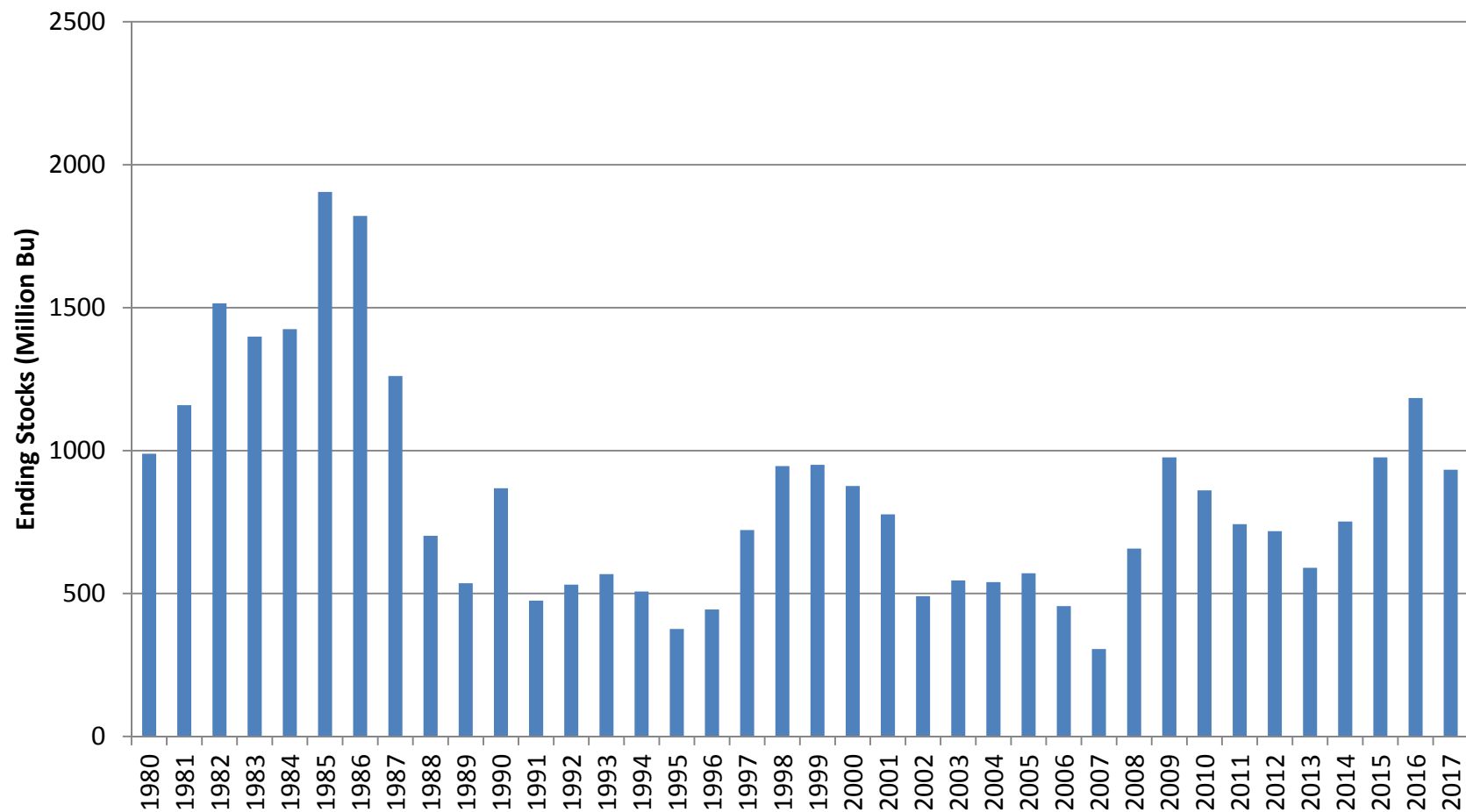
MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Domestic Disappearance



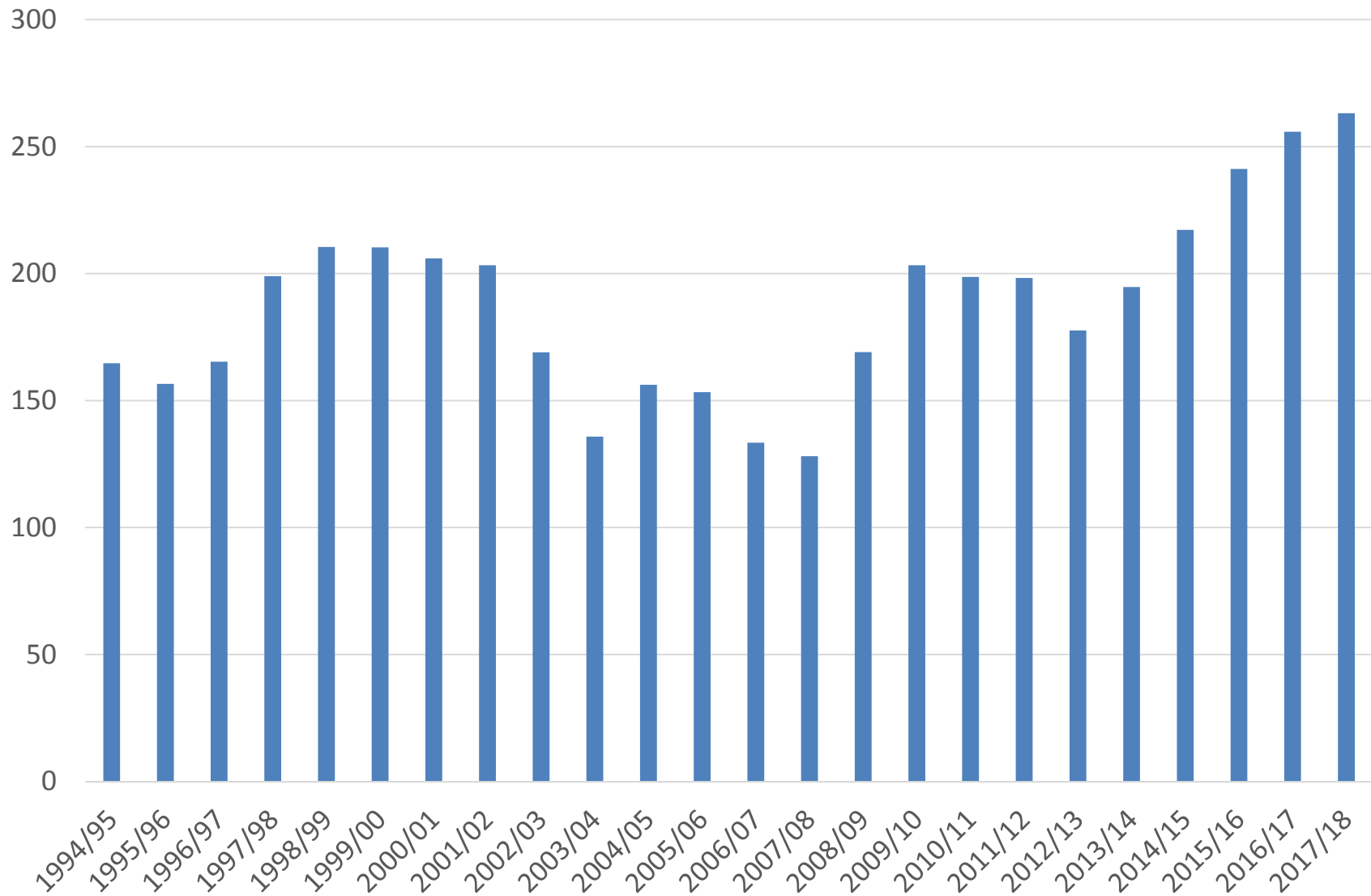
MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

U.S. Wheat Ending Stocks



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Global Ending Stocks (Million Metric Tons)



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Wheat		J	F	M	A	M	J	J	A	S	O	N	D
EU (21%)*	winter				c	c			Harvest			Planting	
China (17%)	spring			Planting			c		Harvest				
	winter		c	c	c			Harvest				Planting	
India (13%)	winter	c	c		Harvest							Planting	
US (8%)	spring				Planting		c	c	Harvest				
	winter				c	c		Harvest			Planting		
Russia (8%)	spring				Planting		c	c	Harvest				
	winter			c	c	c		Harvest			Planting		



Rice

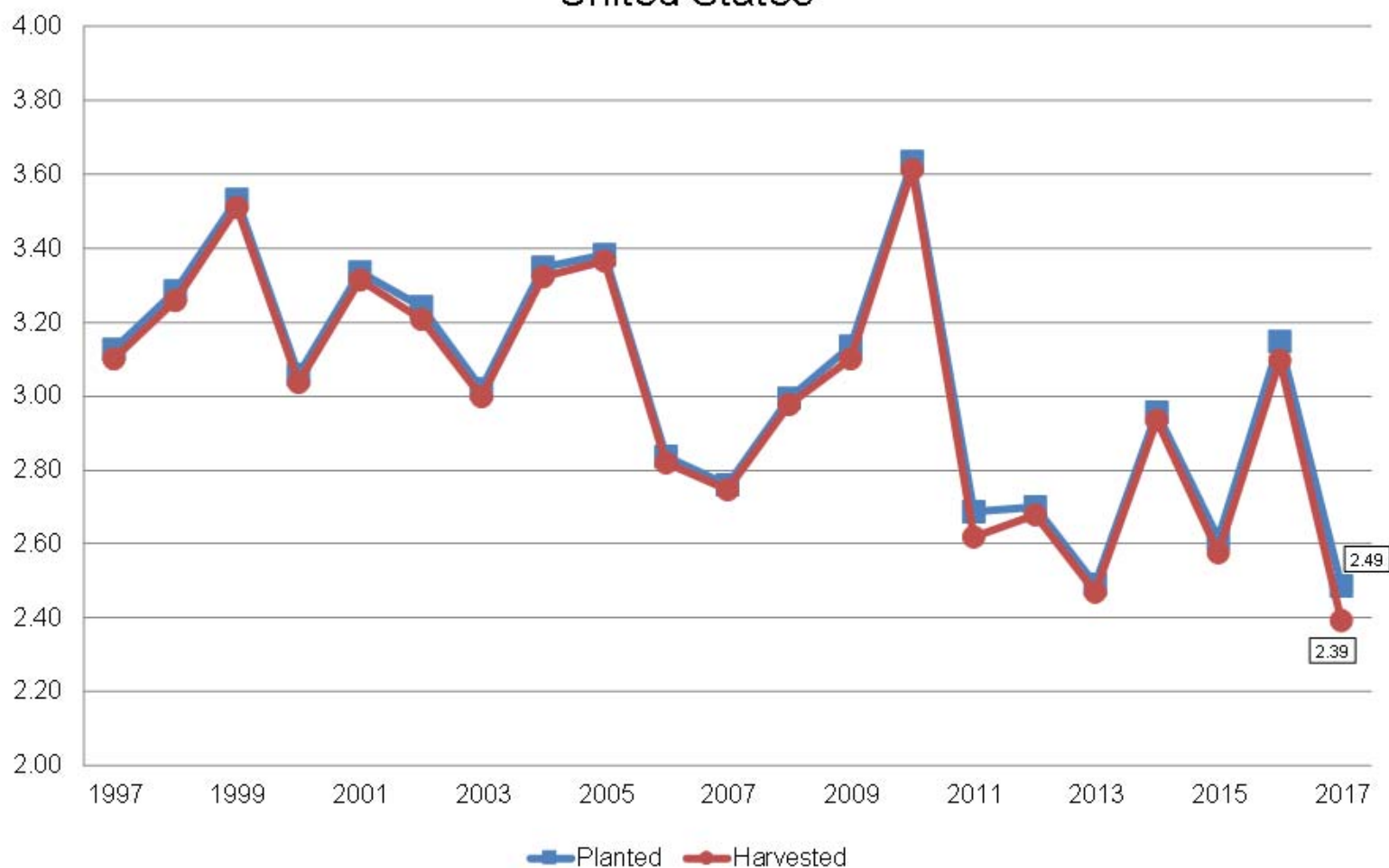


MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



Rice Acres United States

Million Acres



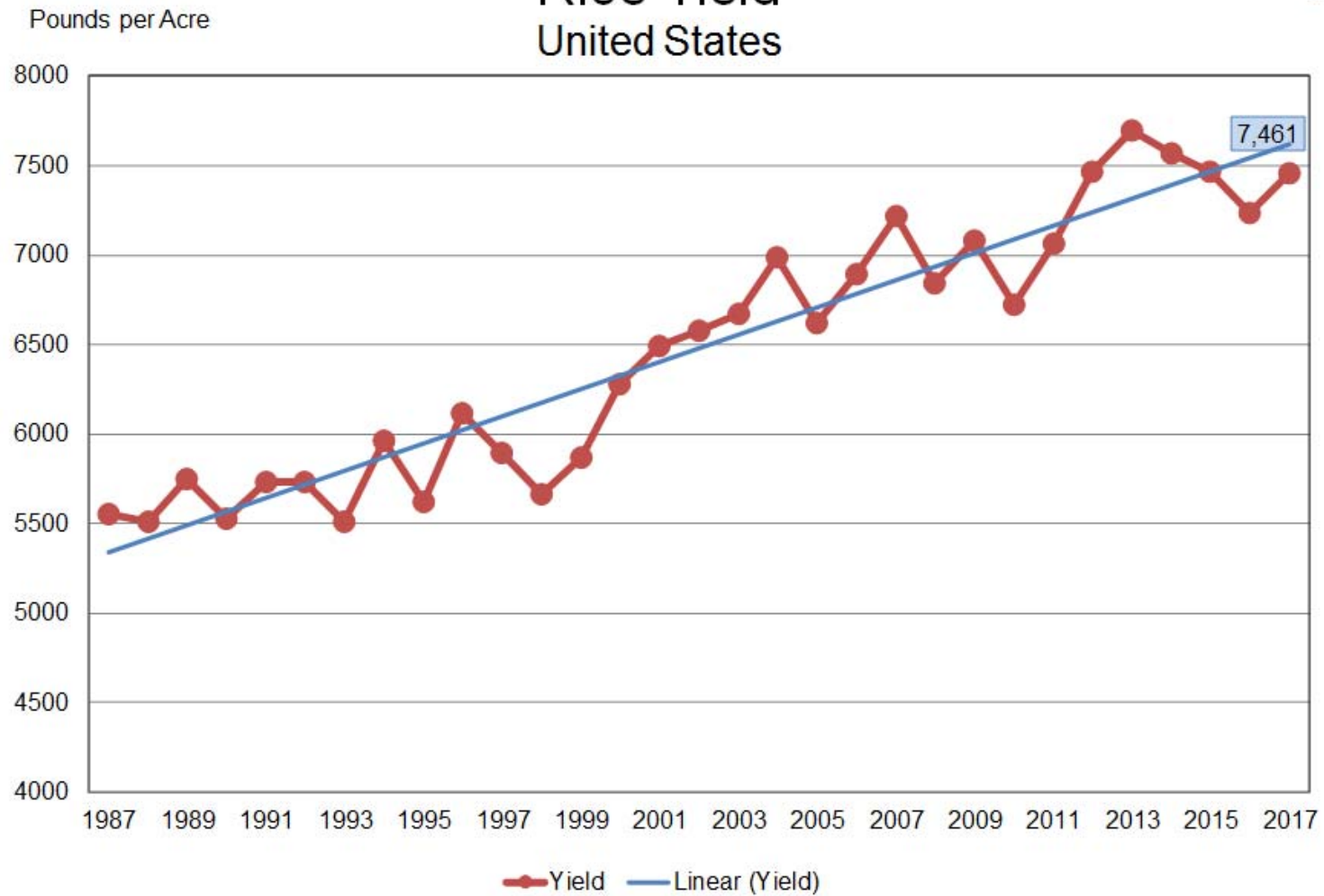
USDA-NASS
10-12-17



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



Rice Yield United States



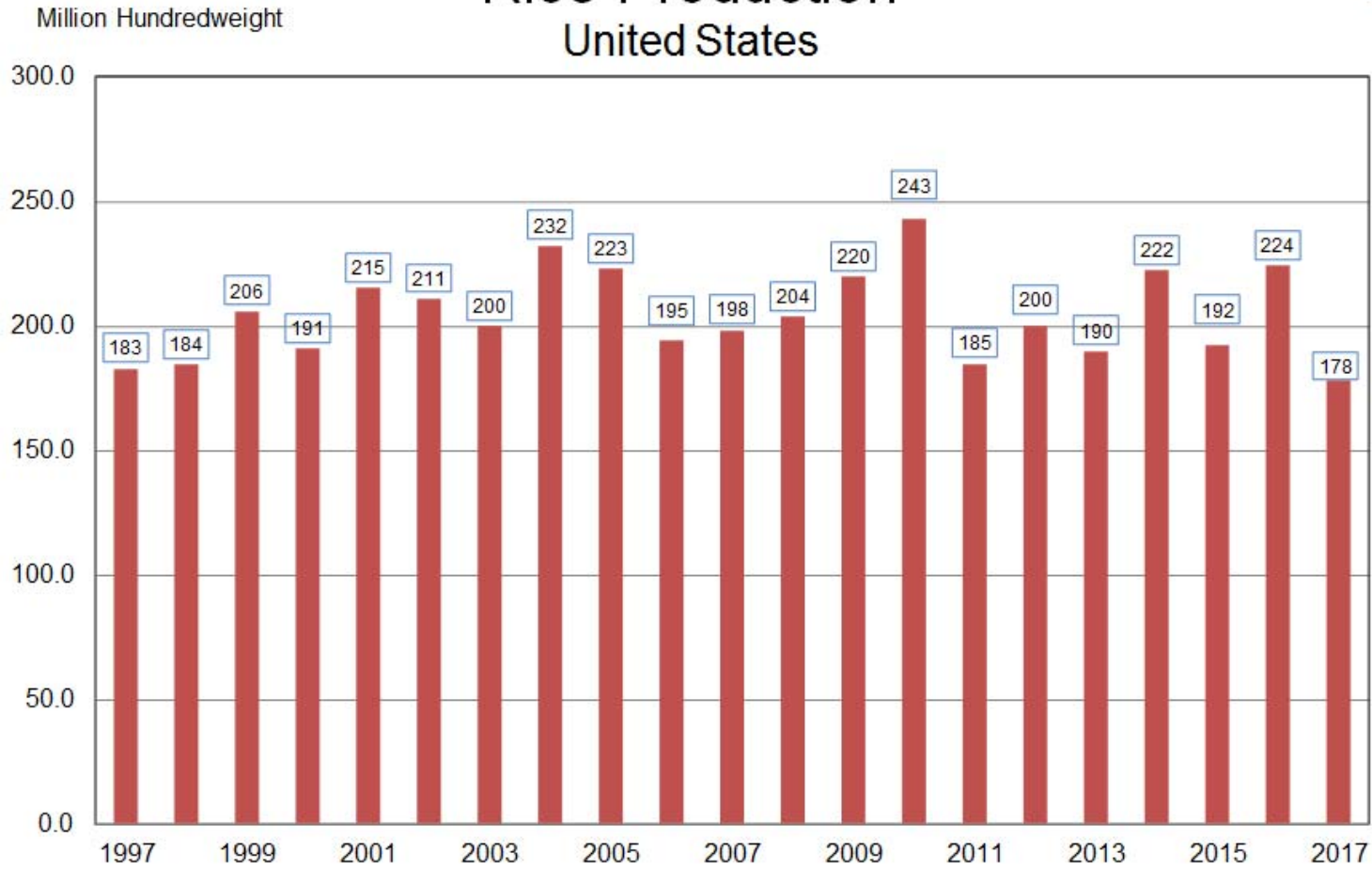
USDA-NASS
11-9-17



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics



Rice Production United States

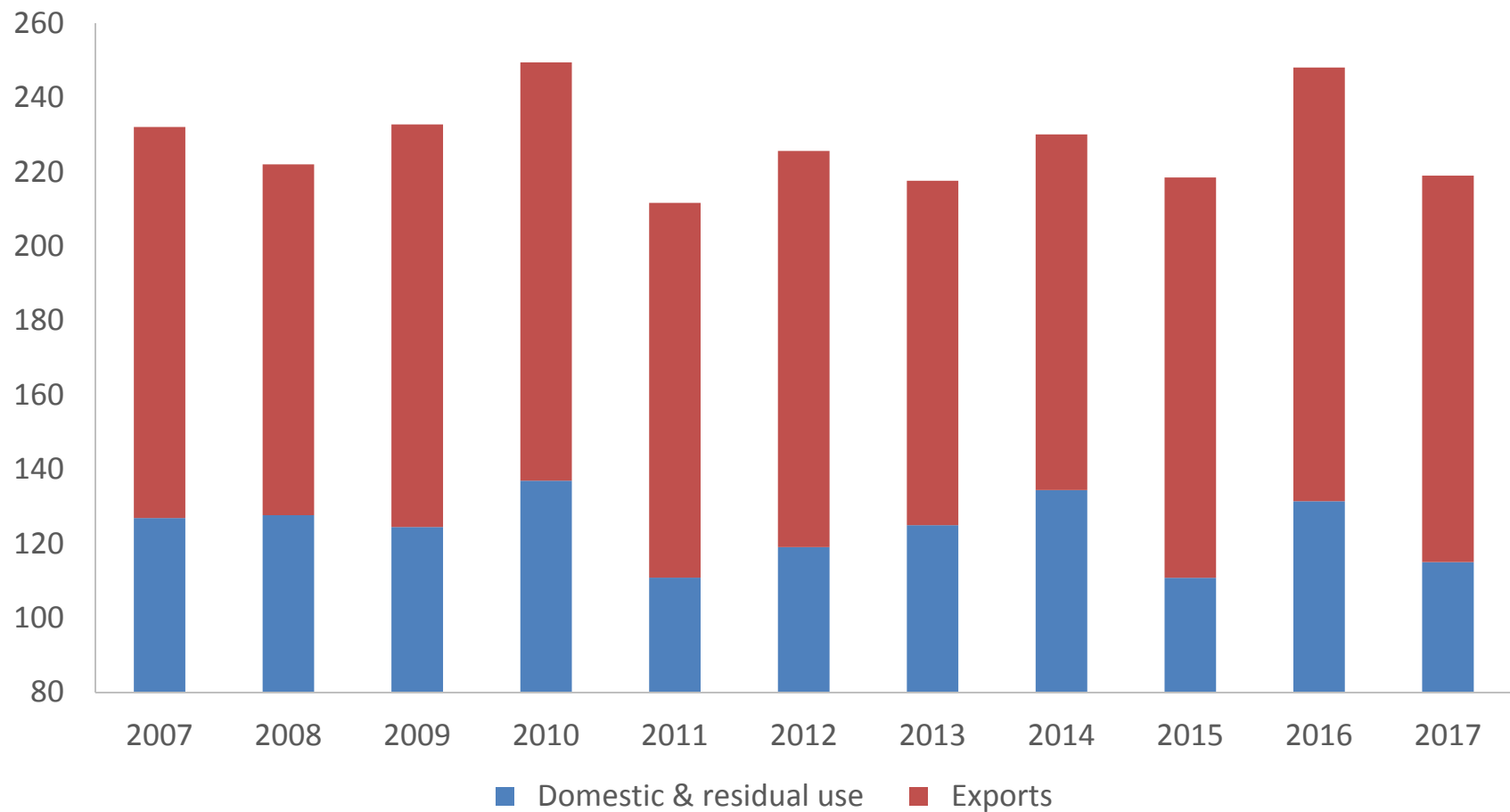


USDA-NASS
11-9-17



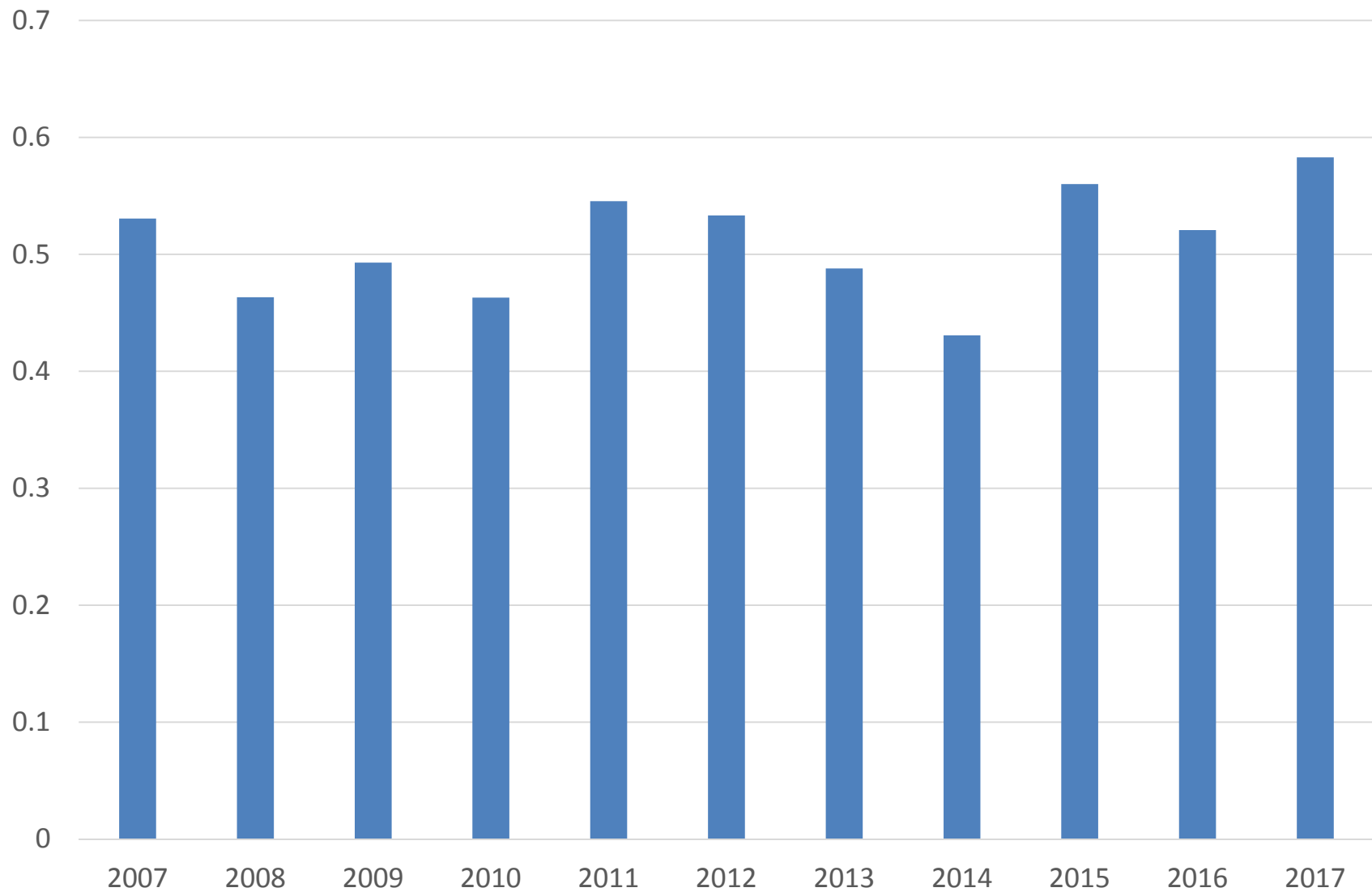
MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Rice Disappearance



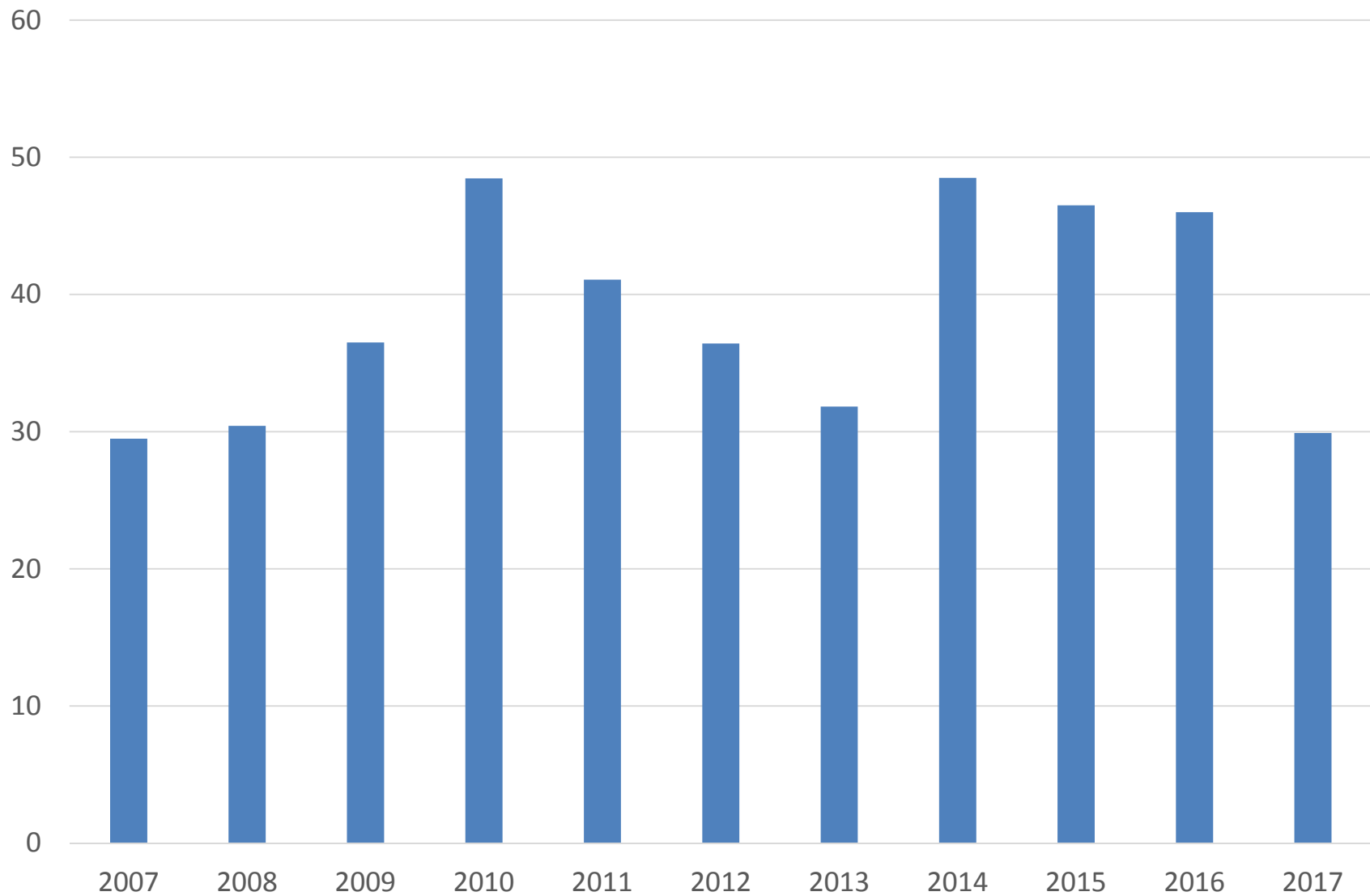
MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Exports as percent of production



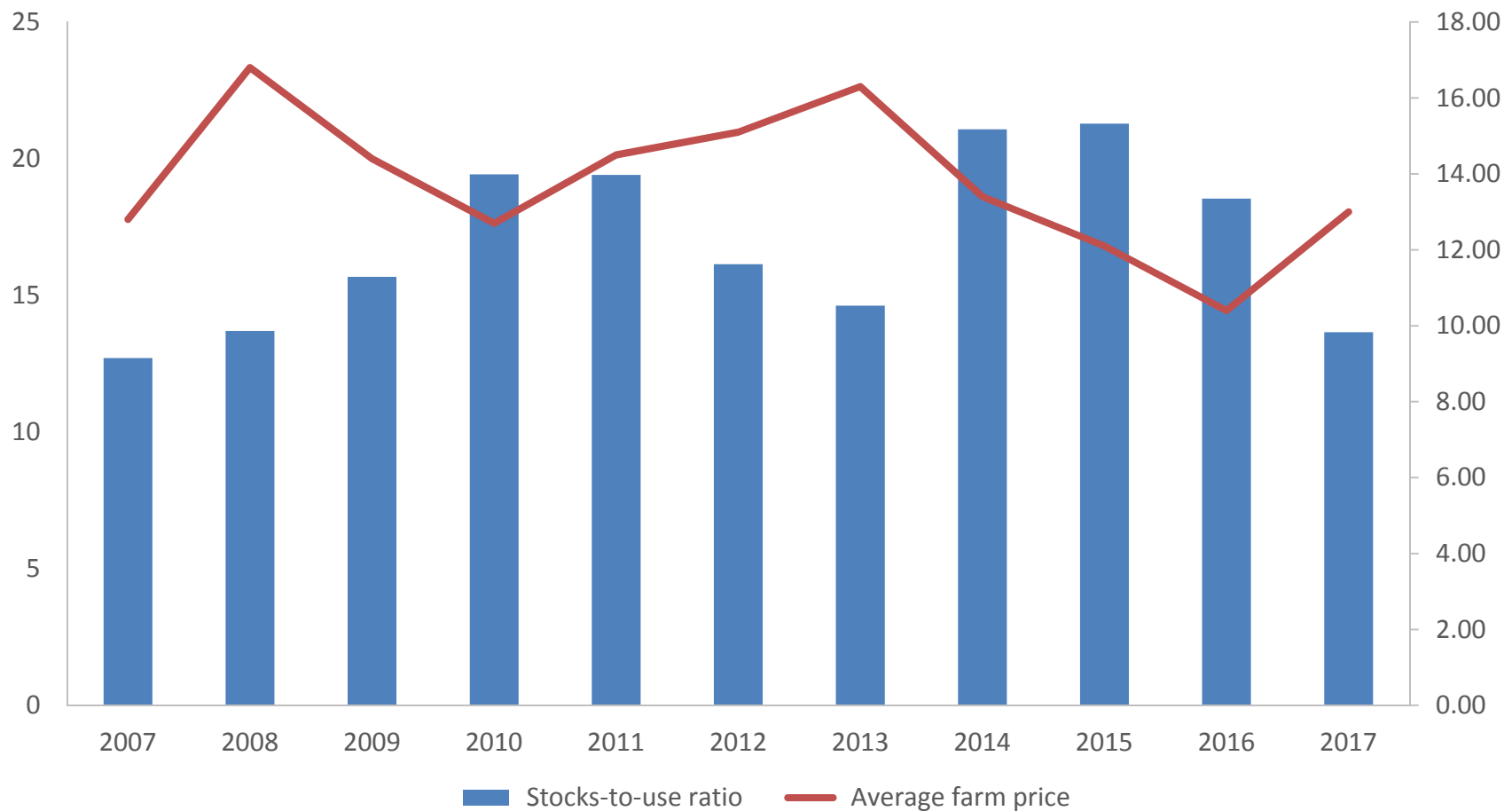
MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Ending stocks



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Rice Stocks-to-use vs. Price



MISSISSIPPI STATE
UNIVERSITY
Department of Agricultural Economics

Thank You!

Brian R. Williams

Assistant Extension Professor

(662) 325-2676

williams@agecon.msstate.edu

Twitter: @BrianRWilliams



MISSISSIPPI STATE
UNIVERSITY

Department of Agricultural Economics