

Grain Market Outlook for 2020

Kansas Crop Insurance Workshop

Salina, Kansas

October 31, 2019

DANIEL O'BRIEN

EXTENSION AGRICULTURAL ECONOMIST

KANSAS STATE
UNIVERSITY

Department of Agricultural Economics



Unpredictable Grain Markets in 2019-20 2

□ The "Ups & Downs" of U.S. Trade Tensions

- **U.S.-Japan Trade Agreement (+)**
 - Likely positive impact on U.S. wheat exports vs TPP Countries
- **U.S. vs China (?)**
 - Soybeans & Sorghum (*Working towards final resolution*)
- **USMCA Trade Agreement** U.S.-Mexico-Canada ⇒ *To be ratified (+)*
 - **Mexico** grain purchases from the U.S.
 - **Canada** grain export competition vs U.S. (Wheat, Oilseeds)

Grain Market Events to Come

3

1) 2019 U.S. Corn & Soybean harvest (*Oct-Nov 2019*)

- **Corn²⁰¹⁹** < 13.8 bln bu? ➔ End Stocks < 1.929 bb?
- **Soybeans²⁰¹⁸** < 3.55 bln bu? ➔ End Stocks < 460 mb?

2) U.S. HRW Wheat Seedings (*Oct 2019*)

- **Dry soils & Fall Harvest** conflicts may ↓ HRW seedings in 2019
- *Struggling profitability for 2013-2018 HRW Wheat*

More Grain Market Events to Anticipate

4

3) Production of “New Crop” MY 2019/20 Export Competitors

- **Soybeans** So-Am 2020 *Up 2-3% vs MY 2018/19* ➔ ‘China demand’
- **Corn** So-Am + Ukraine 2020 *Strong growth* since MY 2015/16
- **Argentina** *politics / export taxes* & **Brazil - Ukraine** *domestic issues*

4) 2019 U.S. Spring Wheat Crop ➔ *Harvest Damage*

- *Wet conditions stopped harvest & damaged last 20-30%*
- *USDA to re-survey & for the November Crop Production report*

More Grain Market Events to Anticipate 5

5) 2020 U.S. Plantings of Fall Harvested Crop (*April-May 2020*)

- 1st determine U.S. crops in fall 2019 (Have short crops or not?)
- Soybeans ^{U.S. 2020} *Uncertain* → ↑↓ ≈ *U.S.-China Trade Status*
- Corn ^{U.S. 2020} *Up* → ↑ ≈ *U.S. Ethanol & Feed Demand*

6) 2020 U.S. HRW Crop Development (*April-June 2020*)

Q? What will the protein &/or quality condition of the 2020 crop be?

Q? What “cross over” *HRS vs HRW* wheat market impacts will occur?

Corn Markets 6



U.S. Corn & Sorghum Stocks.....

7

- **Corn: “Moderate” Stocks & % S/U**

- **End Stocks** 2019/20 ⇒ 1.929 bln bu (vs 2.114 bb last year)
- **% Stocks/Use** 2019/20 ⇒ 13.8% S/U (vs 14.6% S/U last year)

- **Grain Sorghum: “Low” Price\$’s (Still hurt by trade issues)**

- **End Stocks** 2019/20 ⇒ 52 mln bu (↓ *Exports* & ↑ *Ethanol Use*)
- **% Stocks/Use** 2019/20 ⇒ 14.4% S/U (↓ vs 19.1% S/U last year)

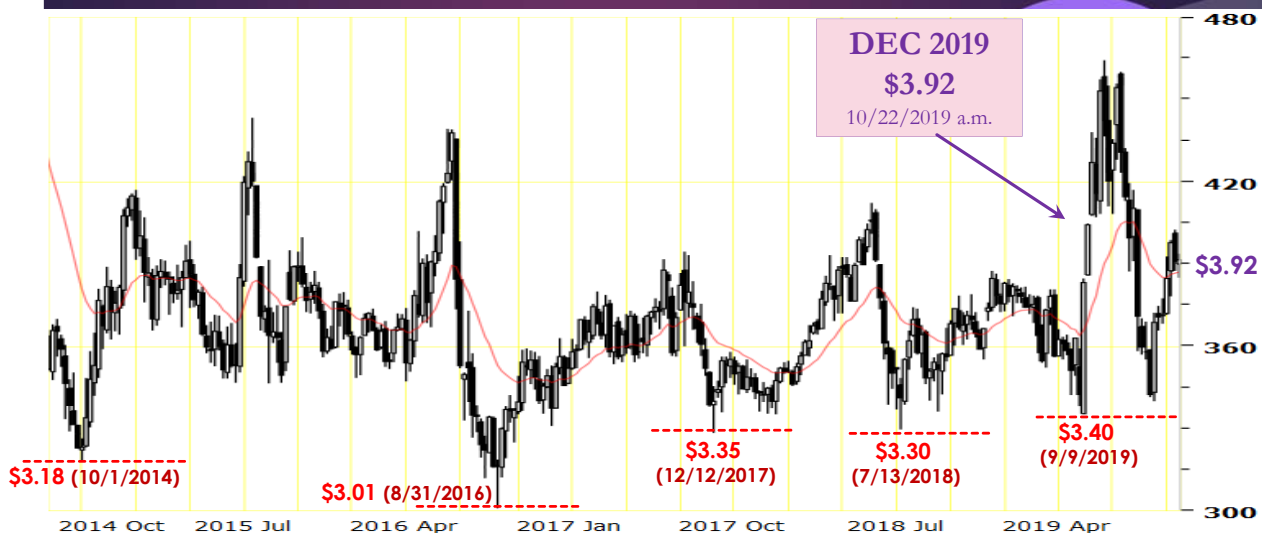
CME Corn Futures

Weekly Chart: September 2014 – October 21, 2019

8



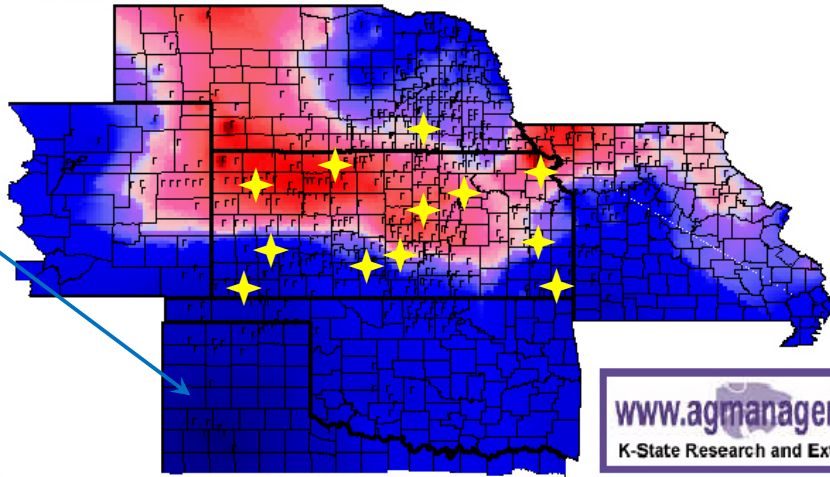
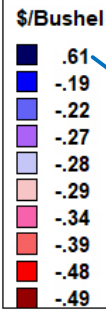
TFC Commodity Charts



Corn Basis, 10-16-2019

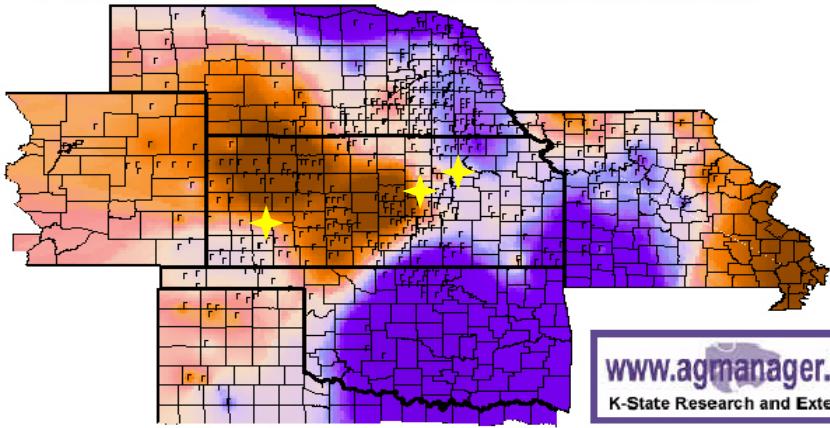
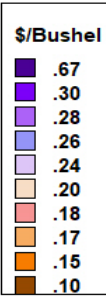
Basis = Cash Price - Nearby Futures Price

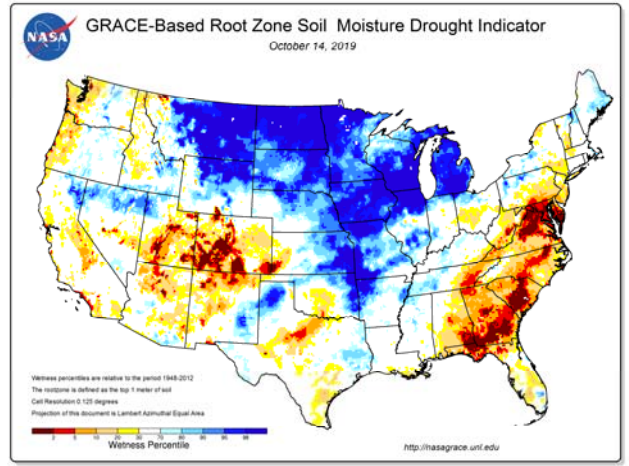
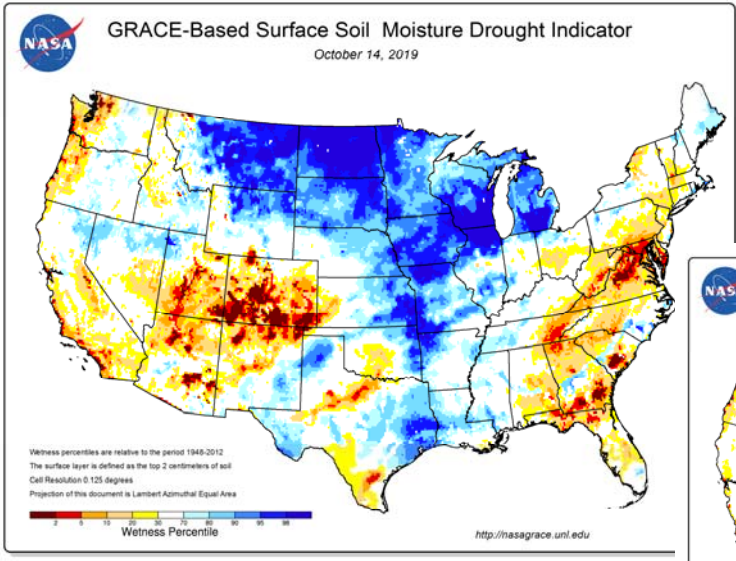
CBT Dec
Futures
Price: \$3.92



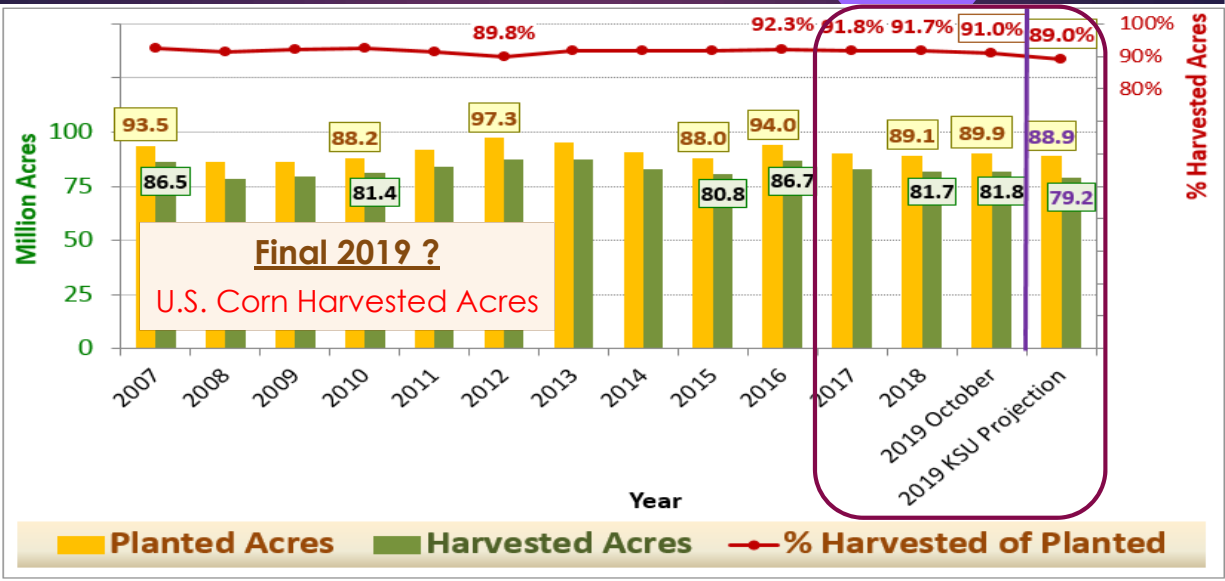
Corn Basis Deviation, 10-16-2019

Basis Deviation = Current Basis - 3 Year Average Basis (2016, 2017, 2018)





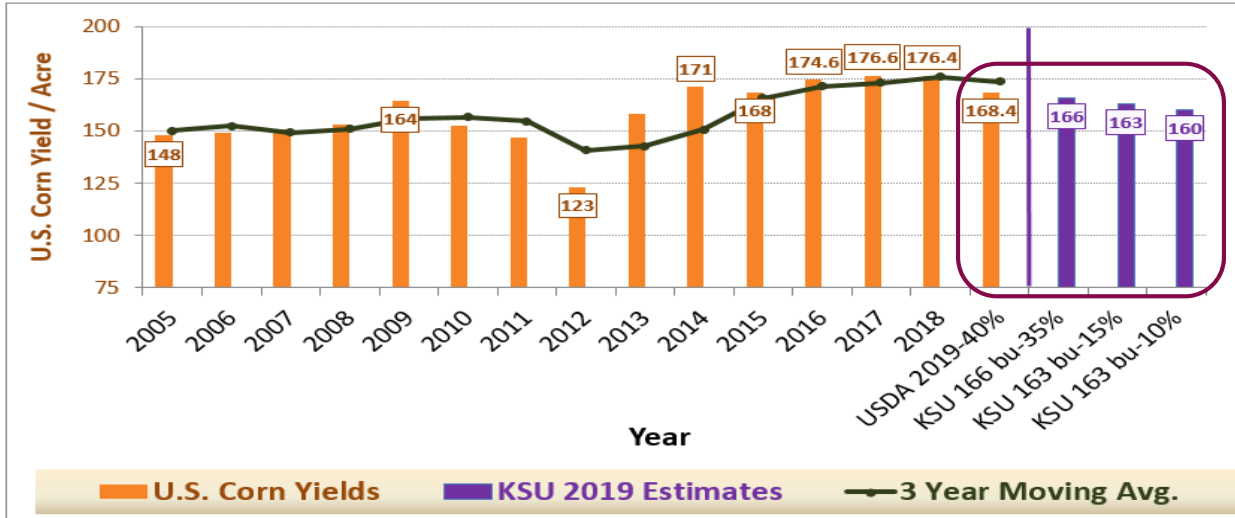
U.S. Corn Acreage



U.S. Corn Yields

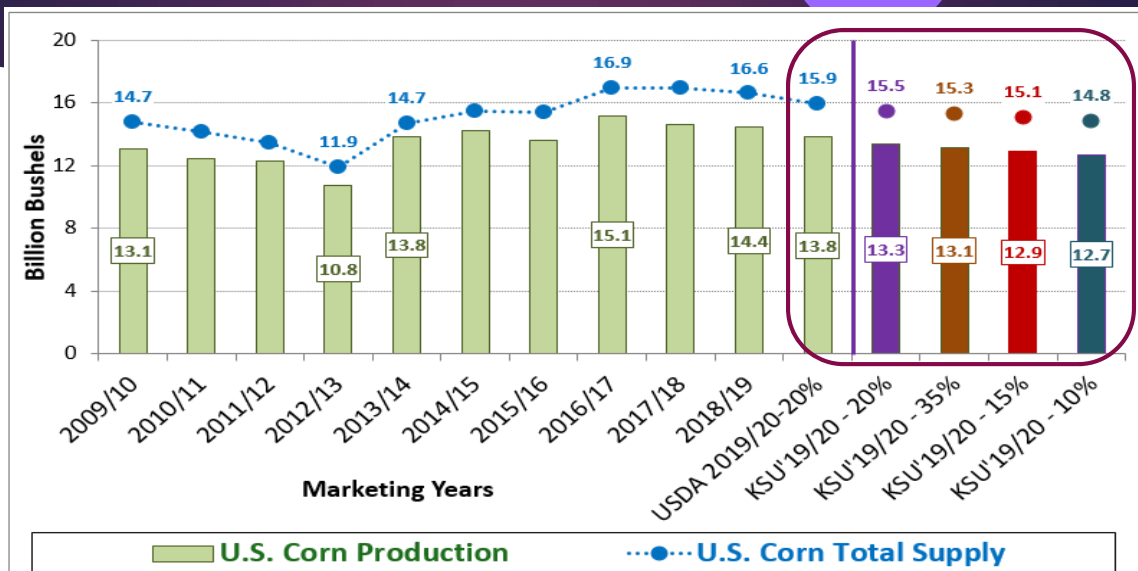
USDA 2019 USDA Forecast = 168.4 bu/ac

16



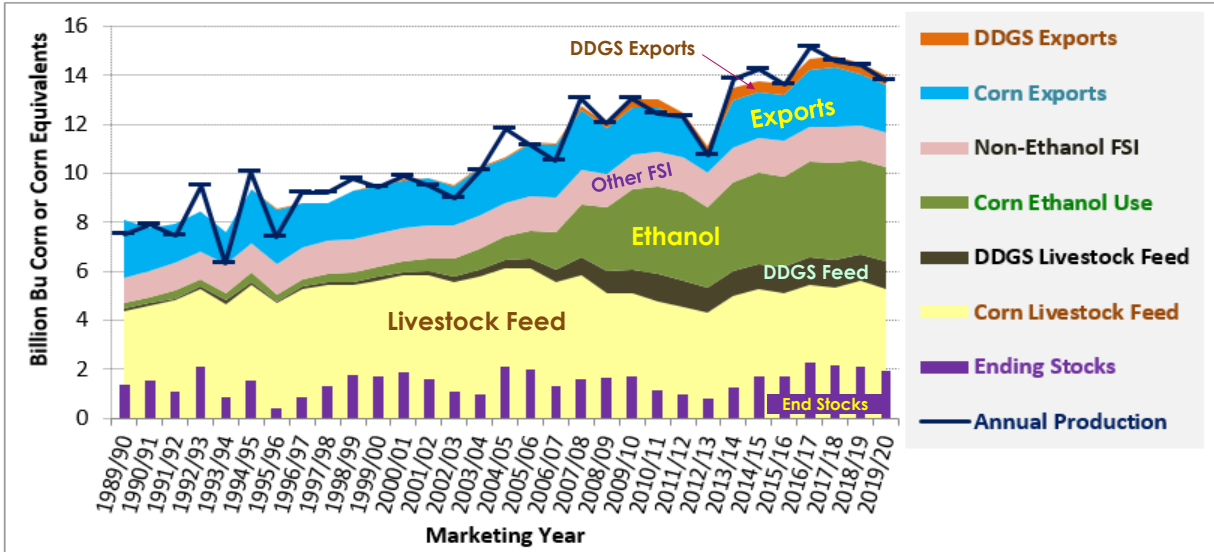
U.S. Corn Production & Supplies

17



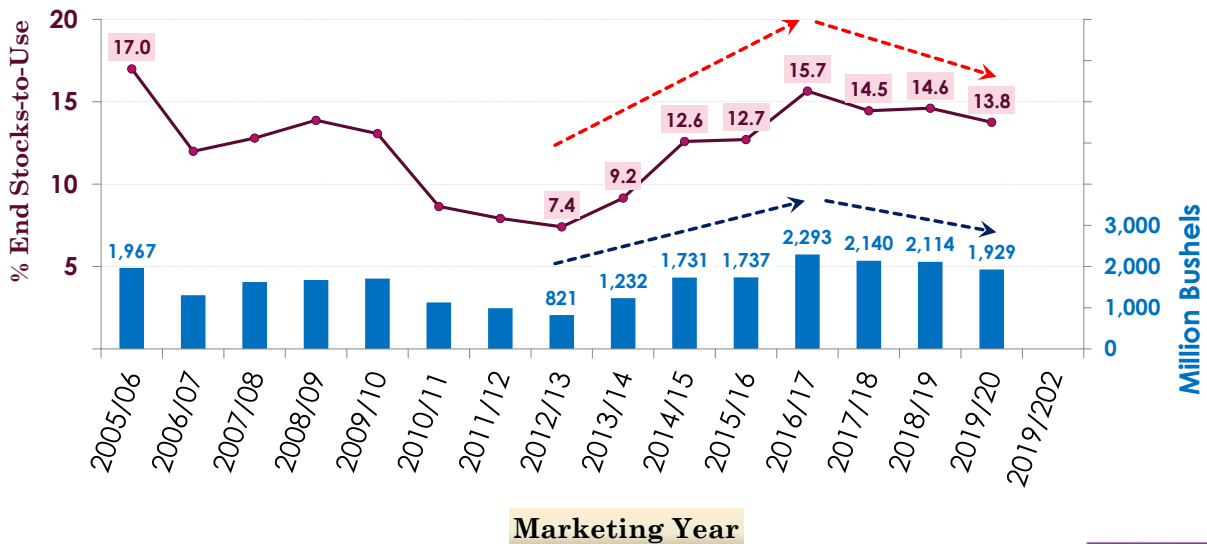
U.S. Corn Use – By Category

18



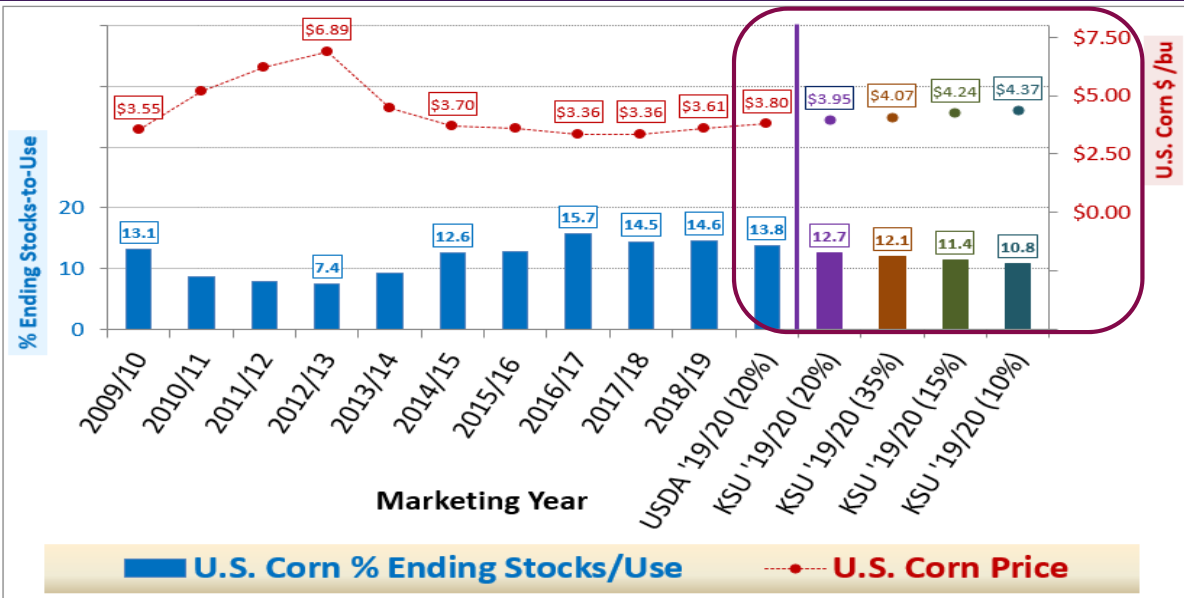
U.S. Corn Ending Stocks & % Stx/Use

19



U.S. Corn % Stocks/Use vs Price\$

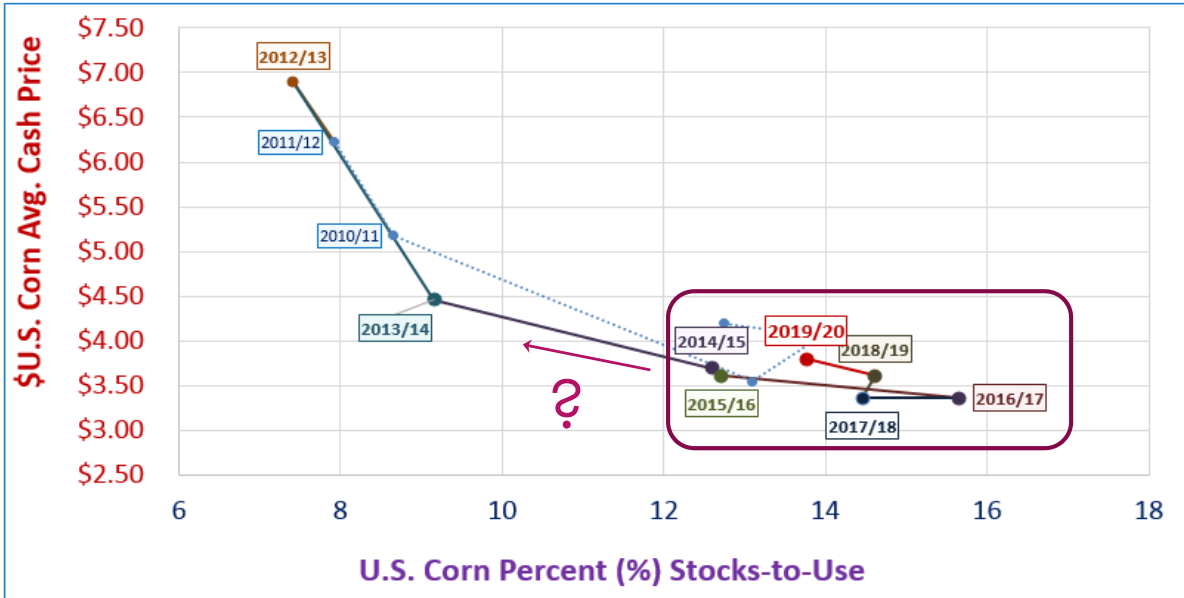
20



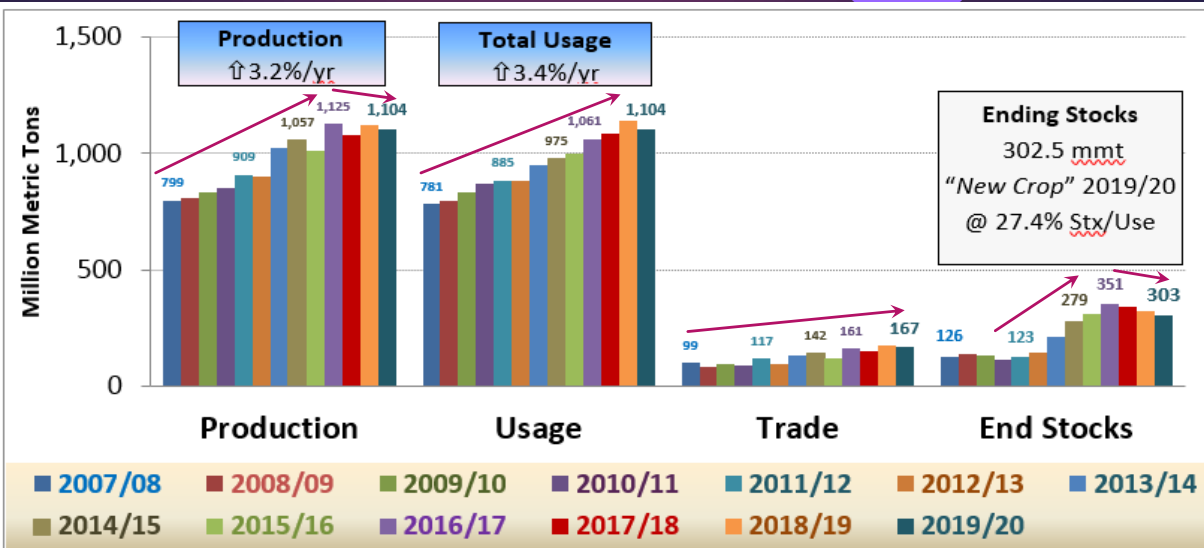
21

Item	USDA 2019/20 10/10/2019 WASDE	Scenario #1 MY 2019/20 88.9942 mln Planted Acres 89.0% Hyst/Plntd Ac & 168.2 bu/ac Yield + Use Rationing		Scenario #2 MY 2019/20 88.9942 mln Planted Acres 89.0% Hyst/Plntd Ac & 166.0 bu/ac Yield + Use Rationing		Scenario #3 MY 2019/20 88.9942 mln Planted Acres 89.0% Hyst/Plntd Ac & 163.0 bu/ac Yield + Use Rationing		Scenario #4 MY 2019/20 88.9942 mln Planted Acres 89.0% Hyst/Plntd Ac & 160 bu/ac Yield + Use Rationing	
		20% ^{KSUest}	20% ^{KSUest}	35% ^{KSUest}	35% ^{KSUest}	15% ^{KSUest}	15% ^{KSUest}	10% ^{KSUest}	10% ^{KSUest}
% Probability of Occurring (KSU)									
Planted Area (million acres)	89,942	-1.000 ma	88,942	-1.000 ma	88,942	-1.000 ma	88,942	-1.000	88,942
Harvested Area (million acres)	81,815	-2.657 ma	79,158	-2.657 ma	79,158	-2.657 ma	79,158	-2.657	79,158
% Harvested/Planted Area	91.0%	-2.0%	89.0%	-2.0%	89.0%	-2.0%	89.0%	-2.0%	89.0%
Yield / harvested acre (bu/ac)	168.4		168.4	-2.4 bu/ac	166.0	-5.4 bu/ac	163.0	-8.4 bu/ac	160.0
Beginning Stocks (million bushels)	2,114		2,114		2,114		2,114		2,114
Production (million bu.)	13,799	-0.469 bb	13,330	-0.659 bb	13,140	-0.896 bb	12,903	-1.134 bb	12,665
Imports (million bu.)	50.0		50		50		50		50
Total Supply (million bu.)	15,944	-0.469 bb	15,494	-0.659 bb	15,304	-0.896 bb	15,067	-1.134 bb	14,829
Ethanol for fuel Use (million bu.)	5,400		5,324		5,292		5,252		5,211
Food & Industrial Use (mln bu.)	1,385		1,365		1,357		1,347		1,330
Seed Use (million bu.)	30.0		30		30		30		30
Exports (million bu.)	1,900		1,808		1,785		1,743		1,700
Feed & Residual Use (million bu.)	5,300		5,225		5,194		5,154		5,115
Total Use (million bu.)	14,015		13,752		13,658		13,526		13,386
Ending Stocks (million bu.)	1,929		1,742		1,646		1,541		1,443
% Ending Stocks-to-Use	13.76%		12.67%		12.05%		11.39%		10.78%
U.S. Corn Average Farm Price (\$/bushel)	\$3.80		\$3.90		\$4.05		\$4.50		\$5.10

U.S. Corn % Stocks/Use vs Price\$



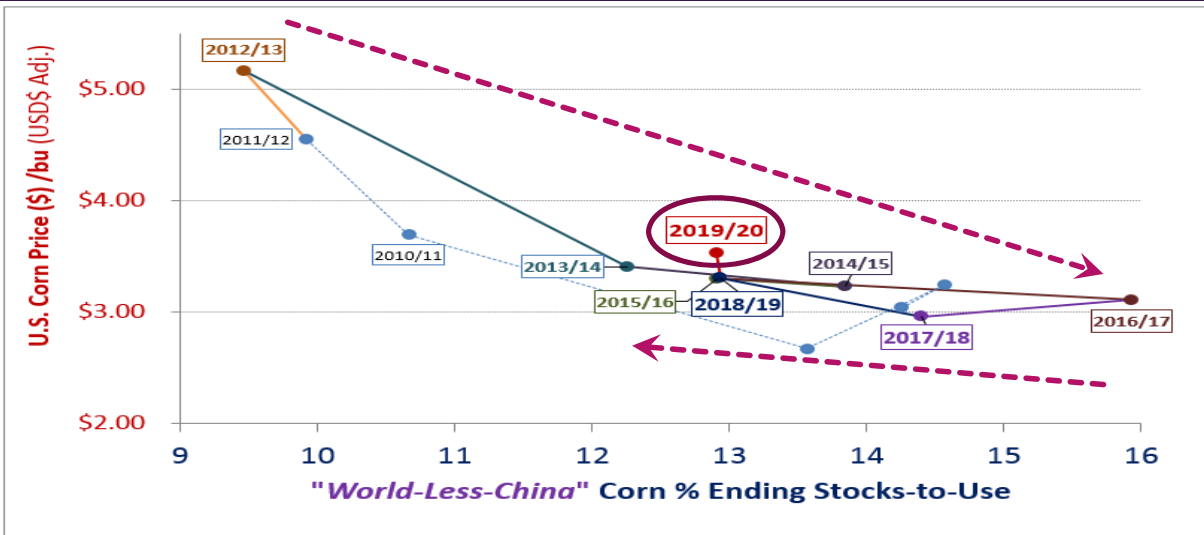
World Corn Supply, Use & Stocks



U.S. Corn \$^{USD-adj} vs World^{Less China} %Stx/Use

MY 2007/08 through "New Crop" MY 2019/20

24



Wheat Markets

25



KANSAS STATE UNIVERSITY

Department of Agricultural Economics

U.S. Wheat Stocks.....

26

- **All U.S. Wheat:** “*Large & Moderating*” **Stocks**
 - **End Stocks** ^{2019/20} ⇒ 1.043 bln bu (*1.080 bb last year*)
 - **% Stocks/Use** ^{2019/20} ⇒ 49.2% S/U (*53.0% Stx/Use last year*)
- **U.S. HRW Wheat:** “*Still Large*” **Carryover** (BUT *declining*)
 - **End Stocks** ^{2019/20} ⇒ 491 mln bu (*732 mb last year*)
 - **% Stocks/Use** ^{2019/20} ⇒ 56.9% S/U (*70.5% Stx/Use last year*)

U.S. Wheat Stocks.....

27

- **U.S. HRS Wheat:** “*Uncertain S-D*” ⇒ **2019 Harvest Problems**
 - **End Stocks** ^{2019/20} ⇒ 308 mln bu ? (*263 bb last year*)
 - **% Stocks/Use** ^{2019/20} ⇒ 54.1% S/U ? (*45.1% Stx/Use last year*)
- **U.S. SRW Wheat:** “*Significant declines*” in forecast **Carryout**
 - **End Stocks** ^{2019/20} ⇒ 110 mln bu (*158 mb last year*)
 - **% Stocks/Use** ^{2019/20} ⇒ 37.7% S/U (*46.9% Stx/Use last year*)

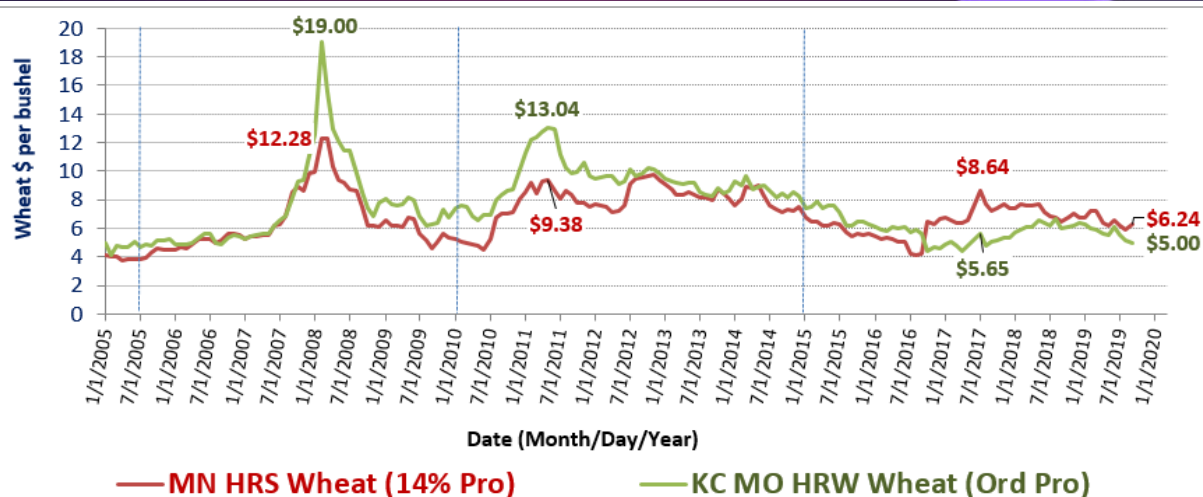
U.S. Wheat Stocks.....

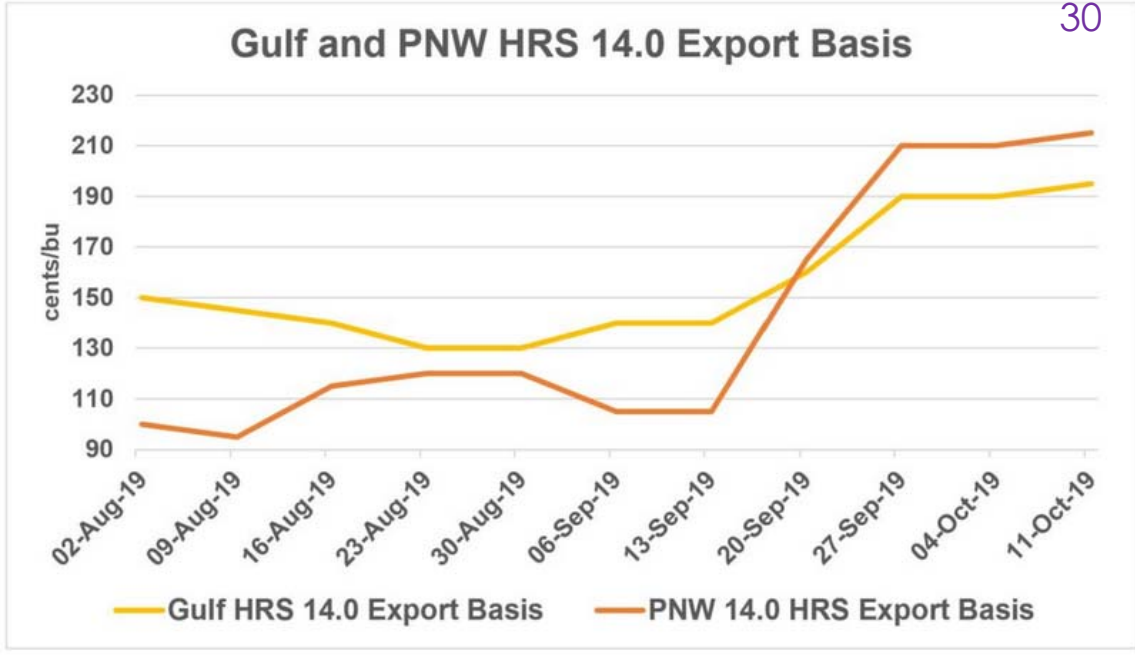
28

- **U.S. White Wheat:** “Positive Export news for Asia Markets”
 - End Stocks 2019/20 ⇒ 85 mln bu (88 bb last year)
 - % Stocks/Use 2019/20 ⇒ 30.4% S/U (31.8% Stx/Use last year)
- **U.S. Durum Wheat:** “Uncertain S-D” ⇒ 2019 Harvest Problems
 - End Stocks 2019/20 ⇒ 49 mln bu (55 mb last year)
 - % Stocks/Use 2019/20 ⇒ 43.4% S/U (50.0% Stx/Use last year)

29

Prices for HRS Wheat 14% Protein (Minneapolis, MN) vs HRW Wheat – Ordinary Protein (Kansas City, MO)



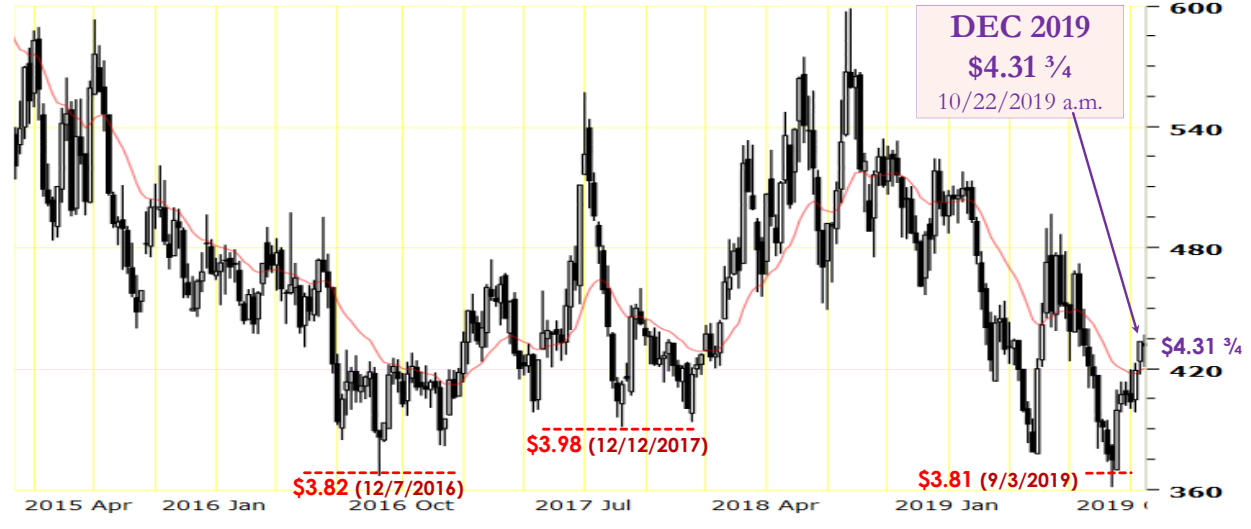


Source: U.S. Wheat Associates Price Report, Oct. 4, 2019

CME Kansas Hard Red Winter Wheat

Weekly Chart: March 2015 – October 22, 2019 a.m.

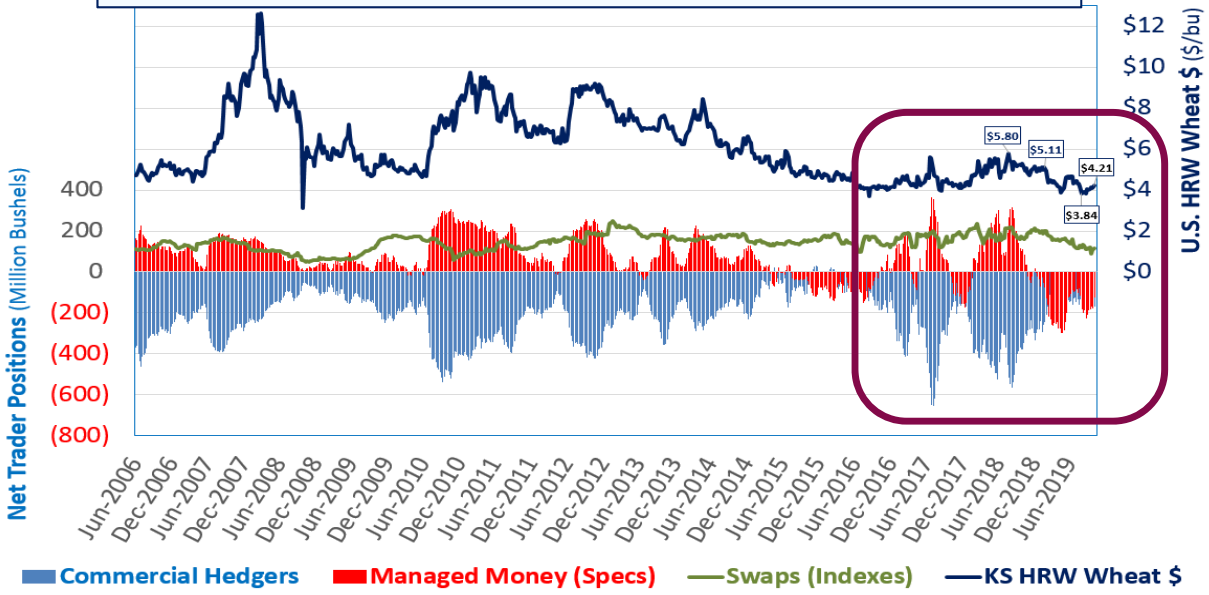
TFC Commodity Charts



Net Position of Traders in CME KS HRW Wheat

CFTC Commitment of Traders to 10/15/2019

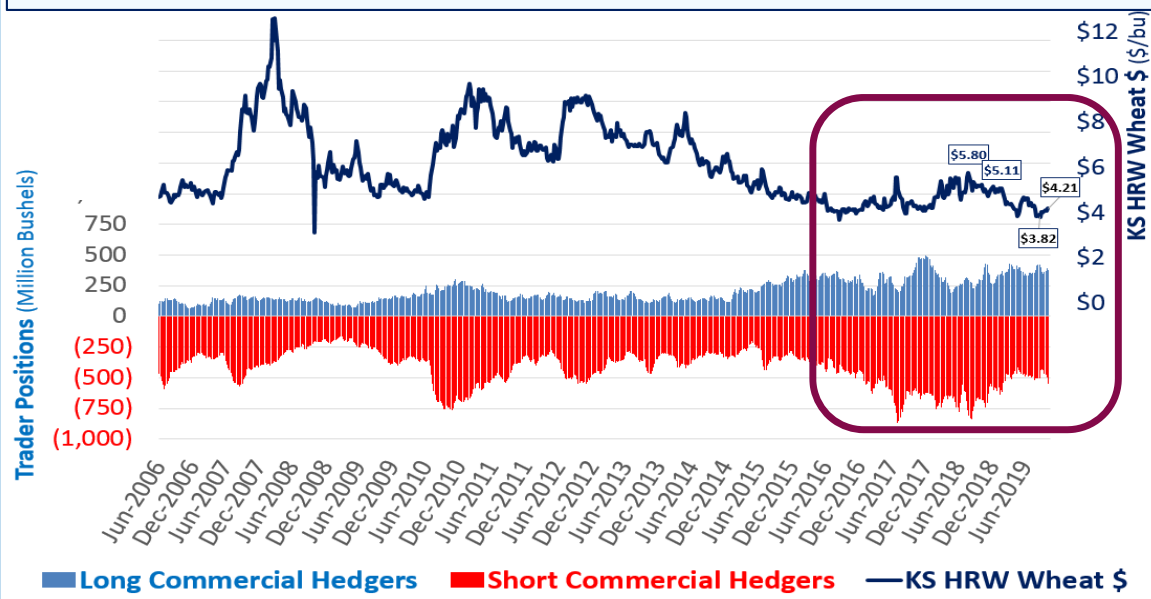
32



Commercial Hedge Positions in CME KS HRW Wheat

CFTC Commitment of Traders to 10/15/2019

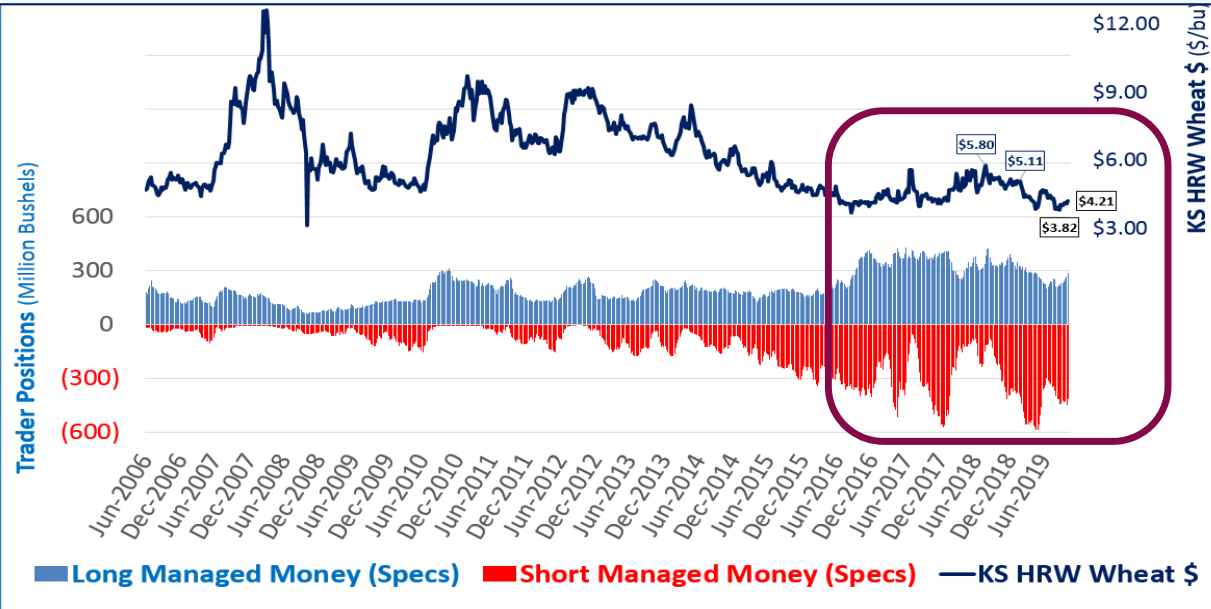
33



Managed Money (Spec) Positions in CME KS HRW Wheat

CFTC Commitment of Traders to 10/15/2019

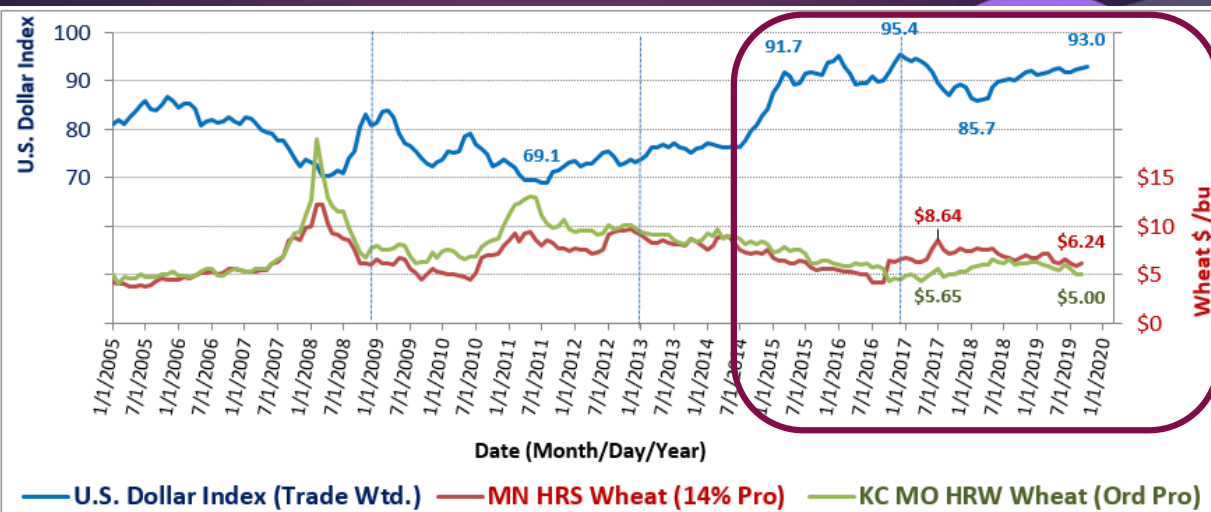
34



U.S. Trade Weighted Dollar Index

vs HRS & HRW Cash Prices (St. Louis Fed/FRED & USDA)

35



MGE HRS Wheat

TFC Commodity Charts

36



Weekly Chart: March 2015 – October 21, 2019



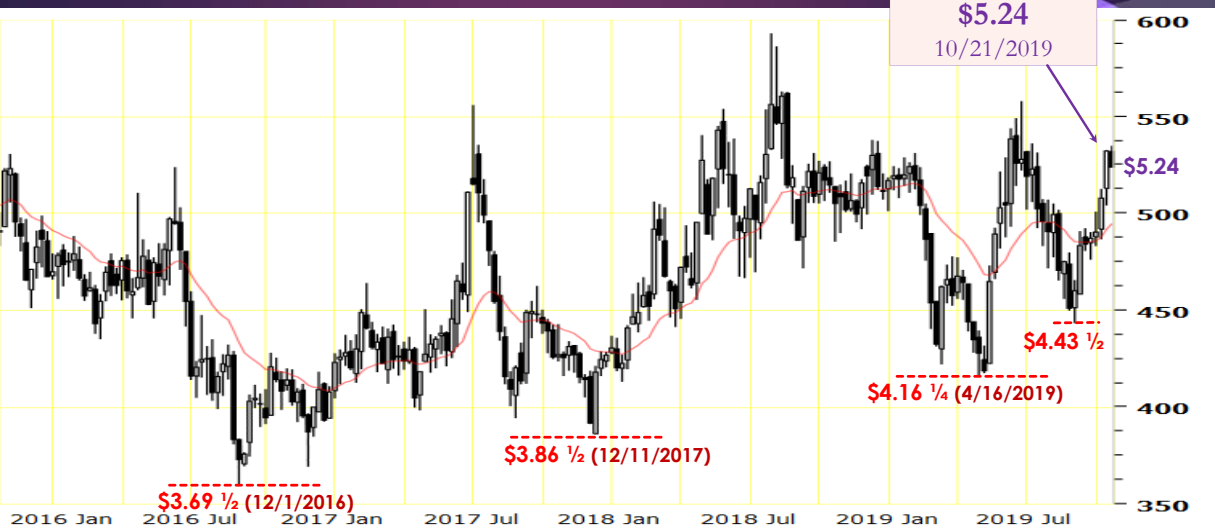
CME Chicago Wheat

TFC Commodity Charts

37



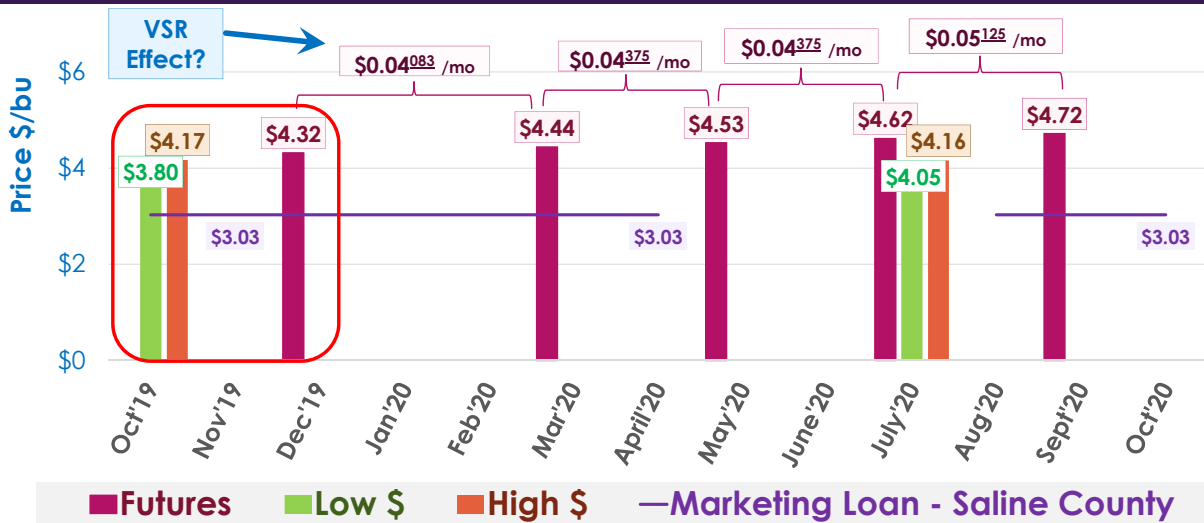
Weekly Chart: March 2015 – October 21, 2019



Wheat Cash & HRW Wheat Futures

38

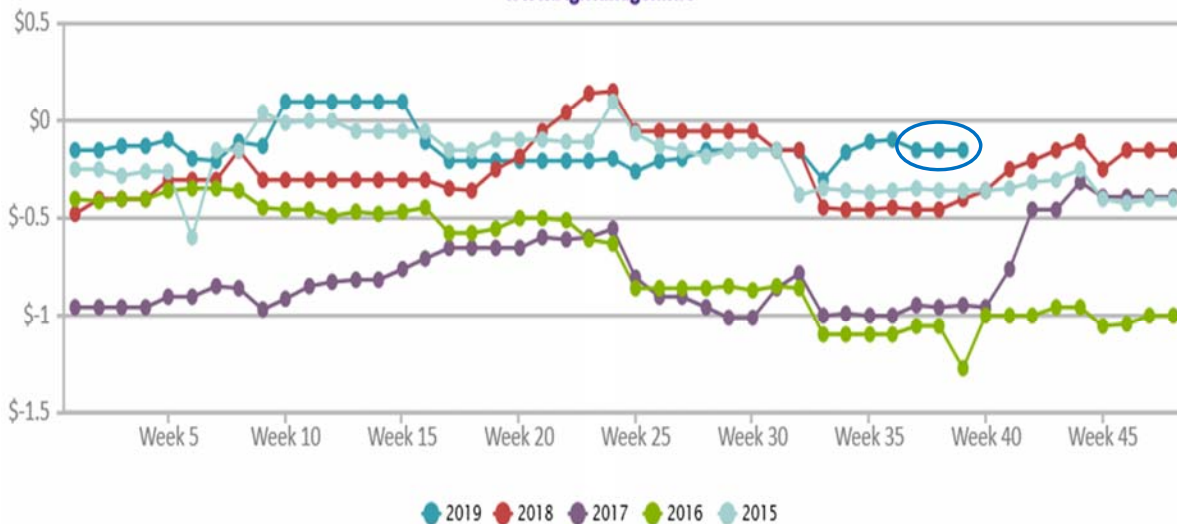
Salina, KS Local Elevators - October 22, 2019 a.m.



SALINA, KS: Hard Red Winter Wheat Basis - CARGILL

39

www.AgManager.info





Wheat Basis, 10-16-2019

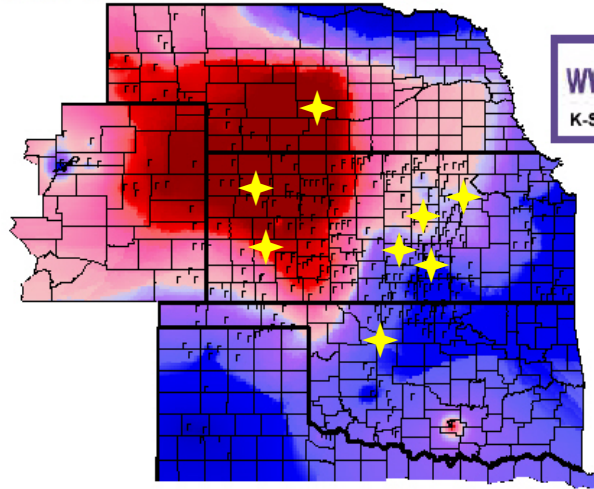
40

Basis = Cash Price - Nearby Futures Price

KCBT Dec
Futures
Price: \$4.25

\$/Bushel

- .10
- -.24
- -.25
- -.34
- -.38
- -.39
- -.48
- -.52
- -.53
- -.60



www.agmanager.info
K-State Research and Extension



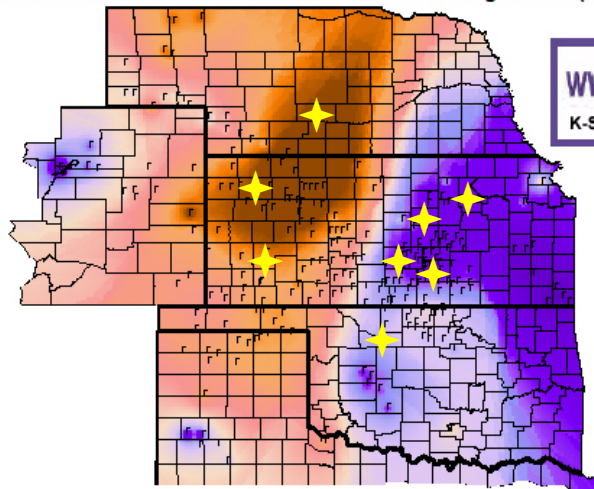
Wheat Basis Deviation, 10-16-2019

41

Basis Deviation = Current Basis - 3 Year Average Basis (2016, 2017, 2018)

\$/Bushel

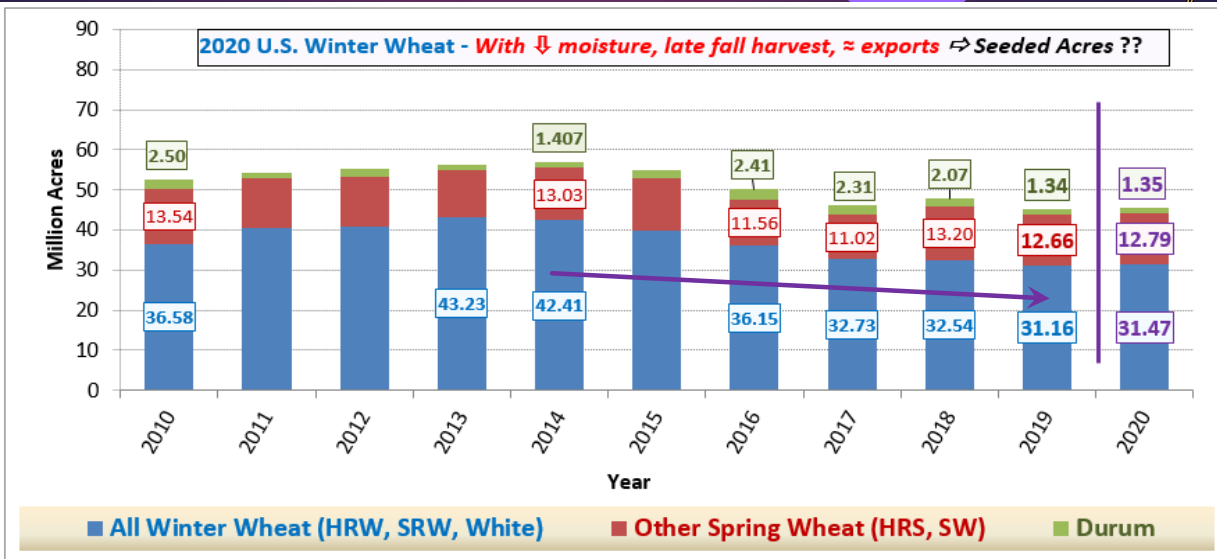
- .90
- .69
- .68
- .67
- .64
- .61
- .57
- .52
- .49
- .44



www.agmanager.info
K-State Research and Extension

U.S. Wheat Seeded Acreage

42



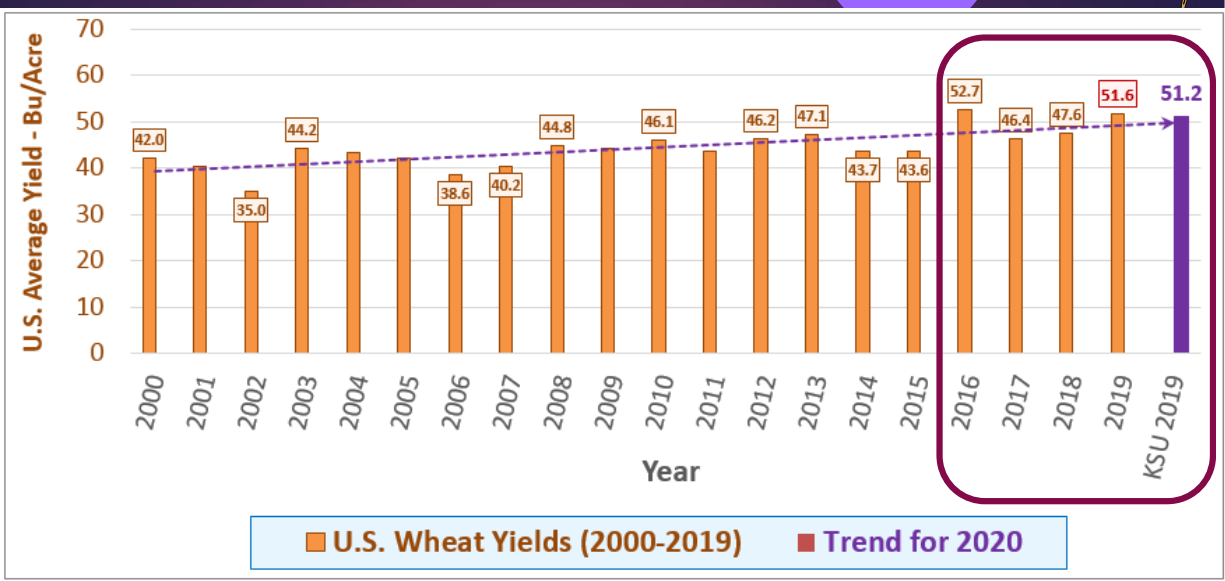
U.S. Wheat Planted & Harvested Acres

43





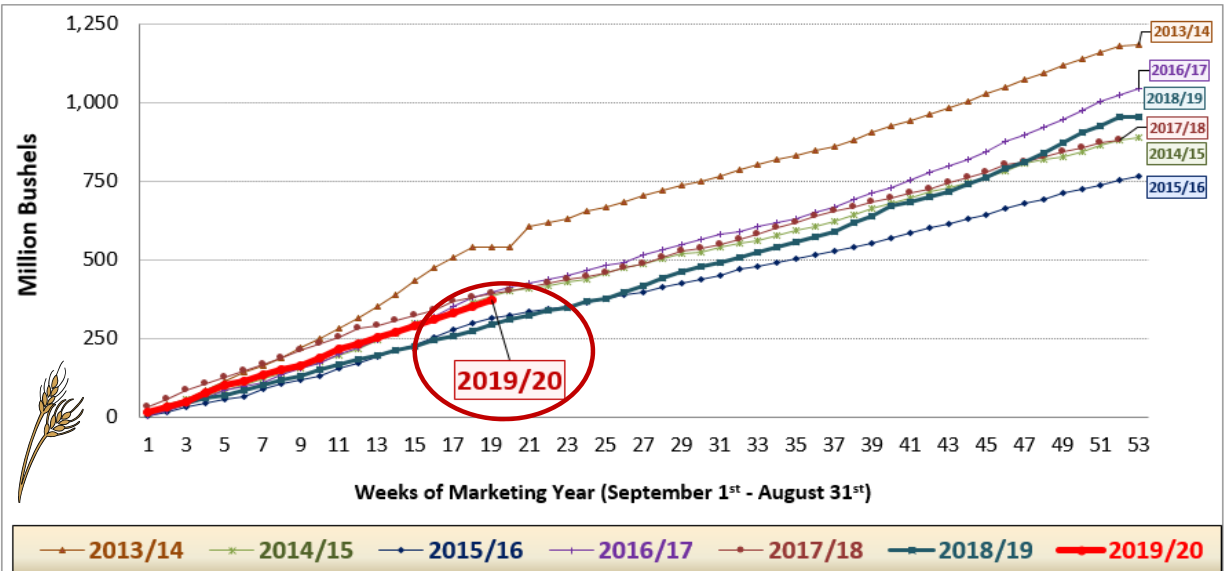
U.S. Wheat Yields



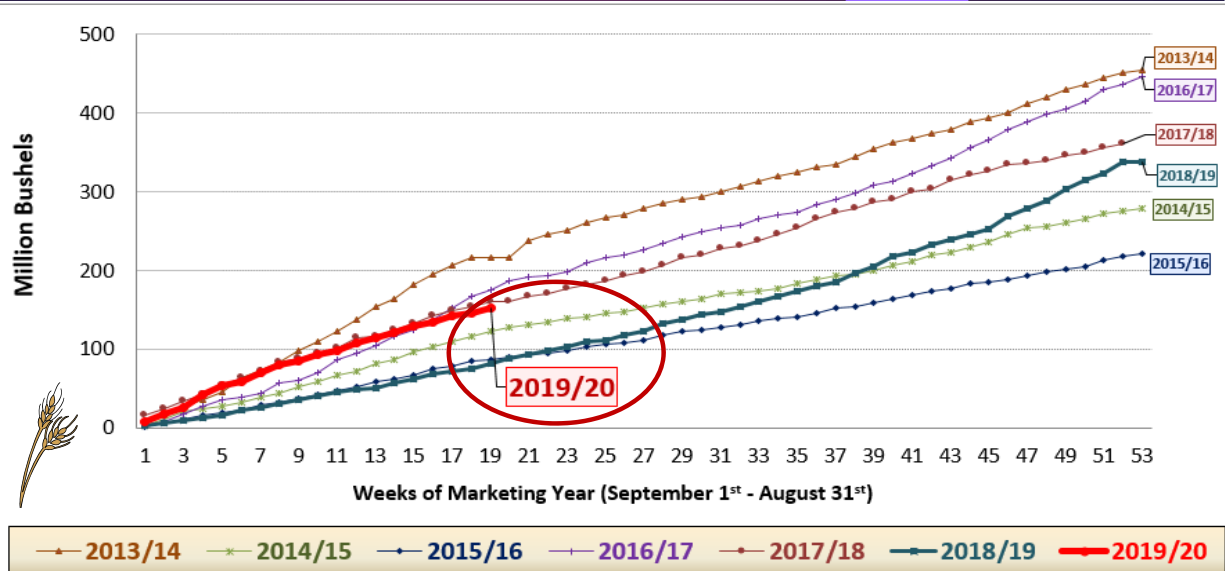
U.S. Wheat Production & Supplies



U.S. All Wheat Exports – Weekly thru October 10, 2019

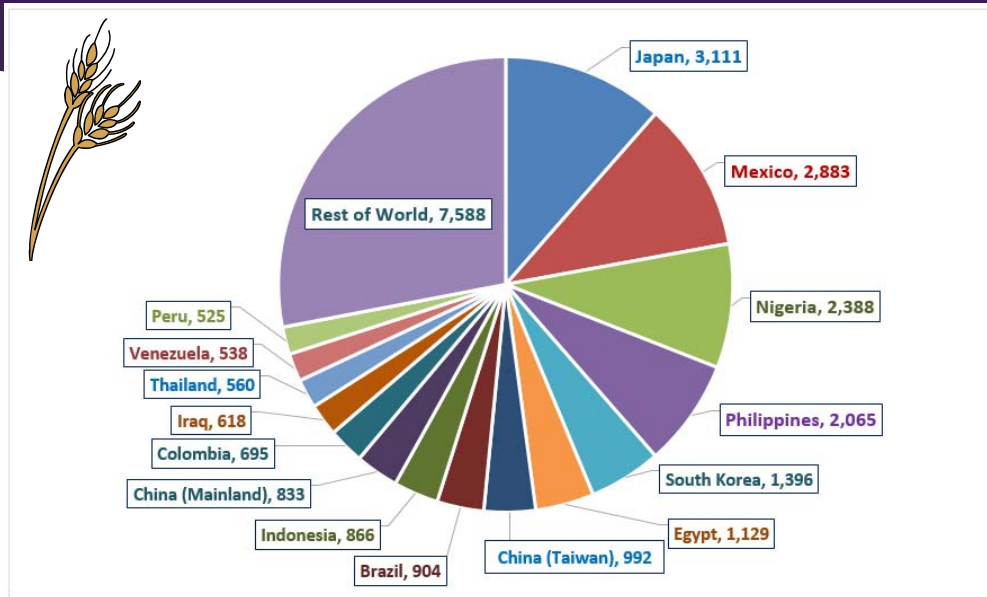


U.S. HRW Wheat Exports – Weekly thru October 10, 2019



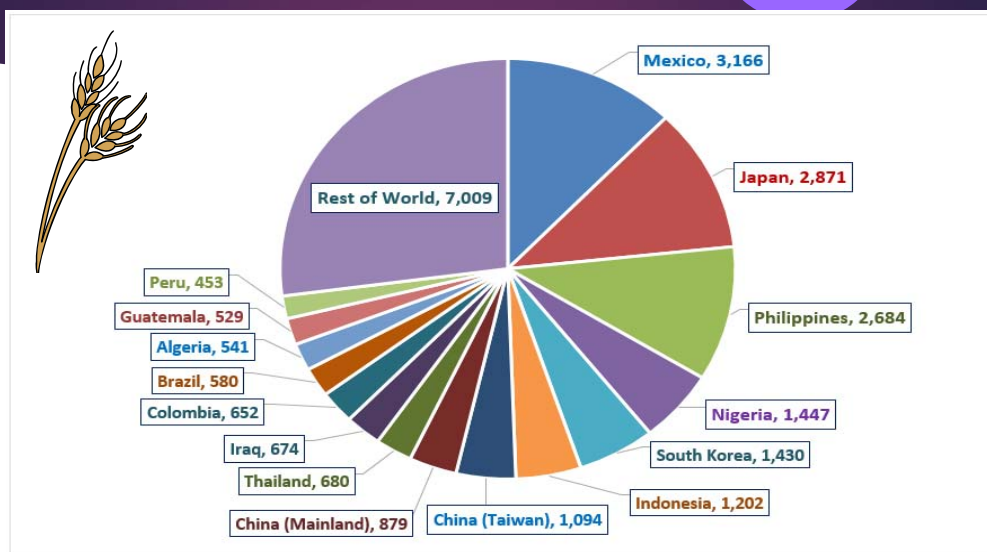
Top 15 U.S. Wheat Export Buyers – Last 12 years

Average Yearly Shipments (MY 2007/08 – 2018/19)



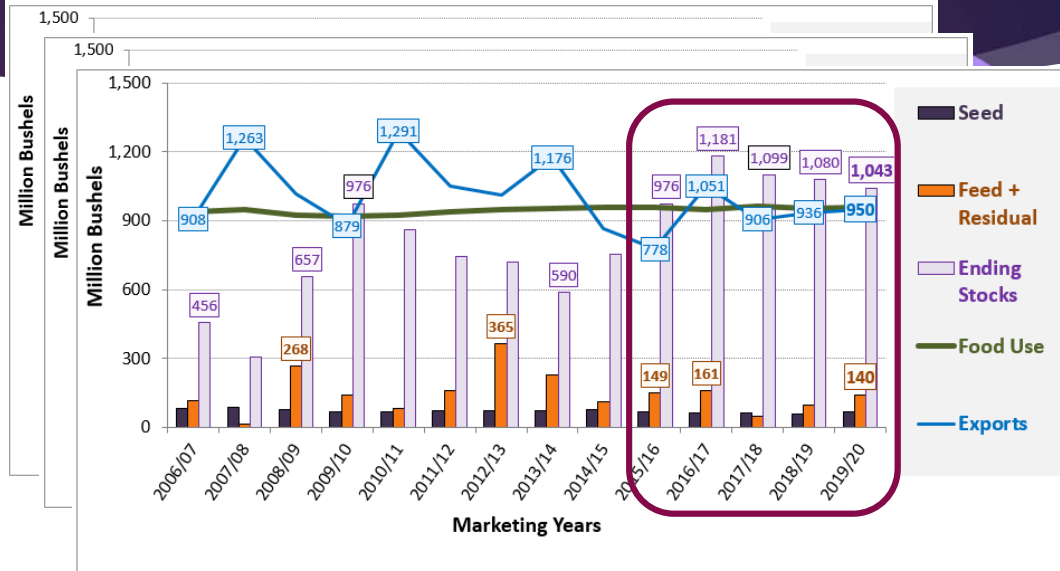
Top 15 U.S. Wheat Export Buyers – Last 3 years

Average Yearly Shipments (MY 2016/17 – 2018/19)



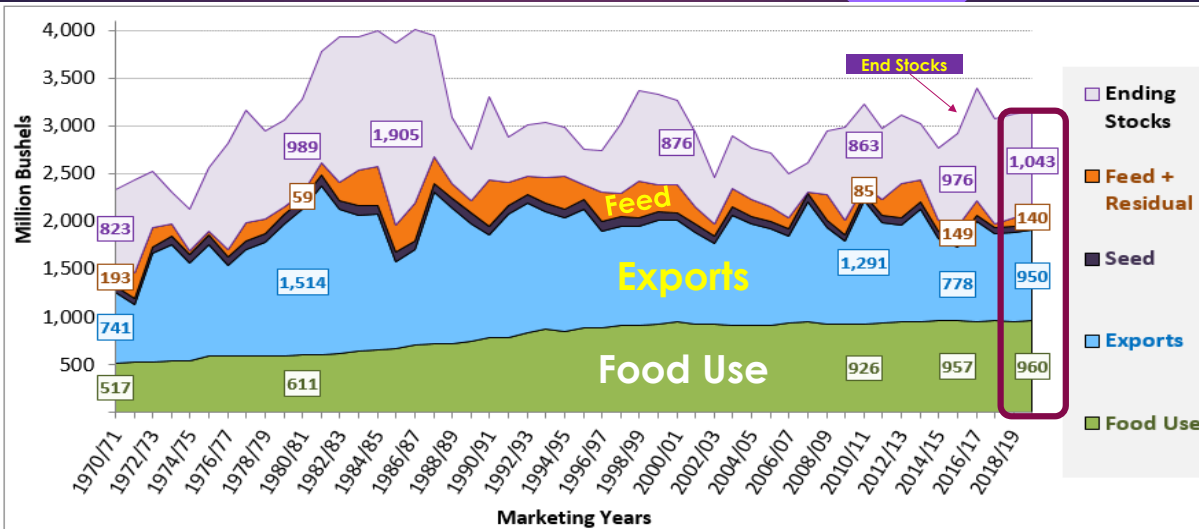
U.S. Wheat Use – By Category

50



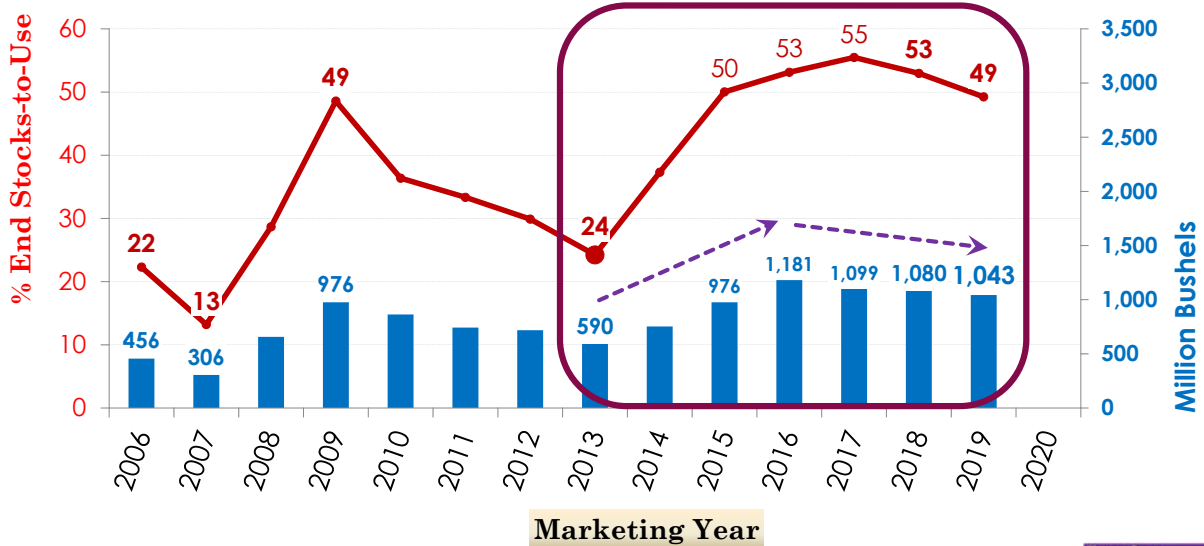
U.S. Wheat Use – By Category

51



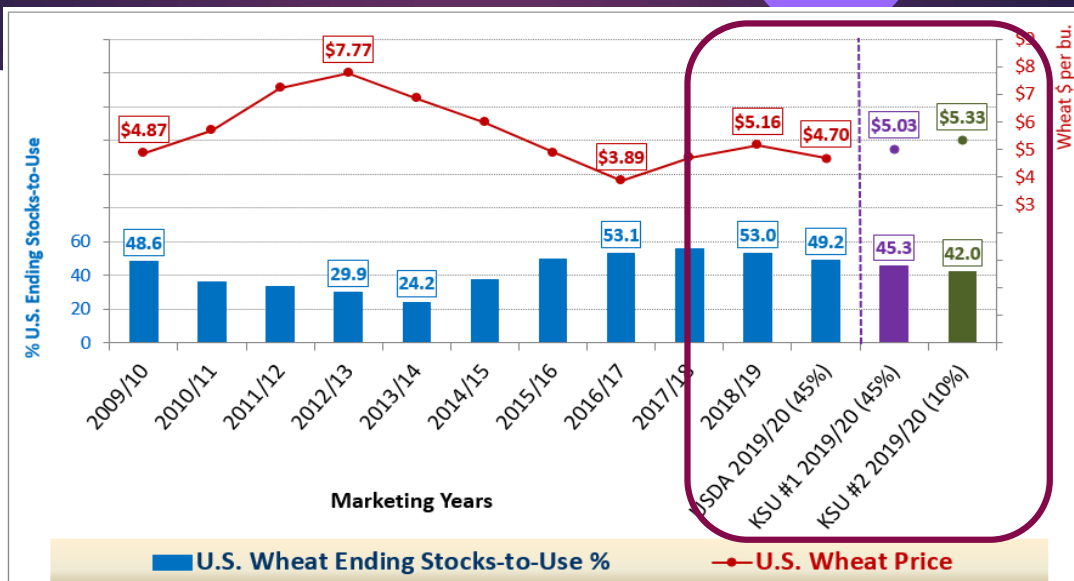
U.S. Wheat Ending Stocks & % Stx/Use

52



U.S. Wheat Ending Stocks/Use & Prices

53



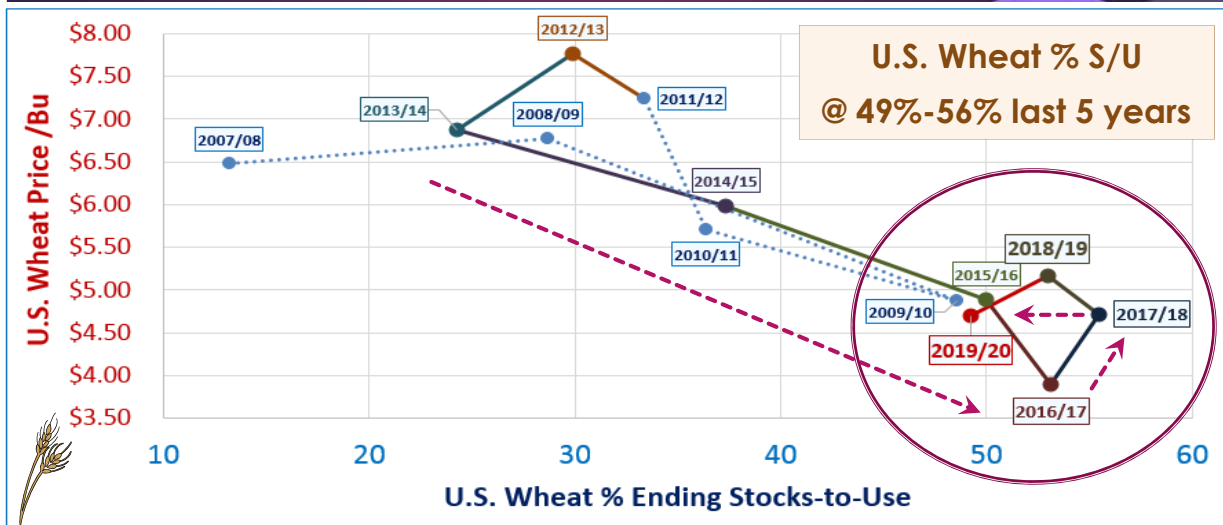
Wheat Market Forecast for "New Crop" MY 2019/20

USDA & KSU estimates for U.S. Stk/Use & Prices

Item	USDA 2019/20	KSU Scenario #1 2019/20		KSU Scenario #2 2019/20	
		U.S. "Short Spring Wheat Crop" Lower HRS Wheat Production (2019 U.S. Other Spring Wheat & Durum Production of 658 mb down 4.3% or 84 million bushels)		U.S. "Short Spring Wheat Crop" Plus Stronger U.S. Wheat Exports (+50 million bushels)	
% Probability of Occurring (KSU est.)	45% prob.	45% prob.		10% prob.	
Planted Area (million acres)	45.158	45.158	45.158	45.158	45.158
Harvested Area (million acres)	38.052	-1.3725 ma	36.680	-12.5%	36.302
% Harvested/Planted Area	84.26%	-3.9%	80.39%	-3.9%	80.39%
Yield / harvested acre (bu/ac)	51.6	-0.4 bu/ac	51.2	-0.4 bu/ac	51.2
Million Bushels					
Beginning Stocks (million bushels)	1,080	1,080	1,080	1,080	1,080
Production (million bu.)	1,962	-84 mb	1,878	-84 mb	1,878
Imports (million bu.)	120	120	120	120	120
Total Supply (million bu.)	3,162	-84 mb	3,078	-84 mb	3,078
Food Use	960	960	960	960	960
Seed Use	68	68	68	68	68
Exports	950	950	950	+50 mb	1,000
Feed & Residual Use	140	140	140	140	140
Total Use	2,118	2,118	2,118	+50 mb	2,168
Ending Stocks (million bu.)	1,044	-84 mb	960	-134 mb	910
% Ending Stocks-to-Use	49.29%	45.33%	45.33%	41.97%	41.97%
U.S. Wheat Avg. Farm Price (\$/bushel)	\$4.70	\$5.03 (U.S. Stocks/Use)		\$5.33 (U.S. Stocks/Use)	

U.S. Wheat Price (\$) vs U.S. % Stocks/Use 55

MY 2007/08 – "New Crop" MY 2019/20



World Wheat Market Prospects:

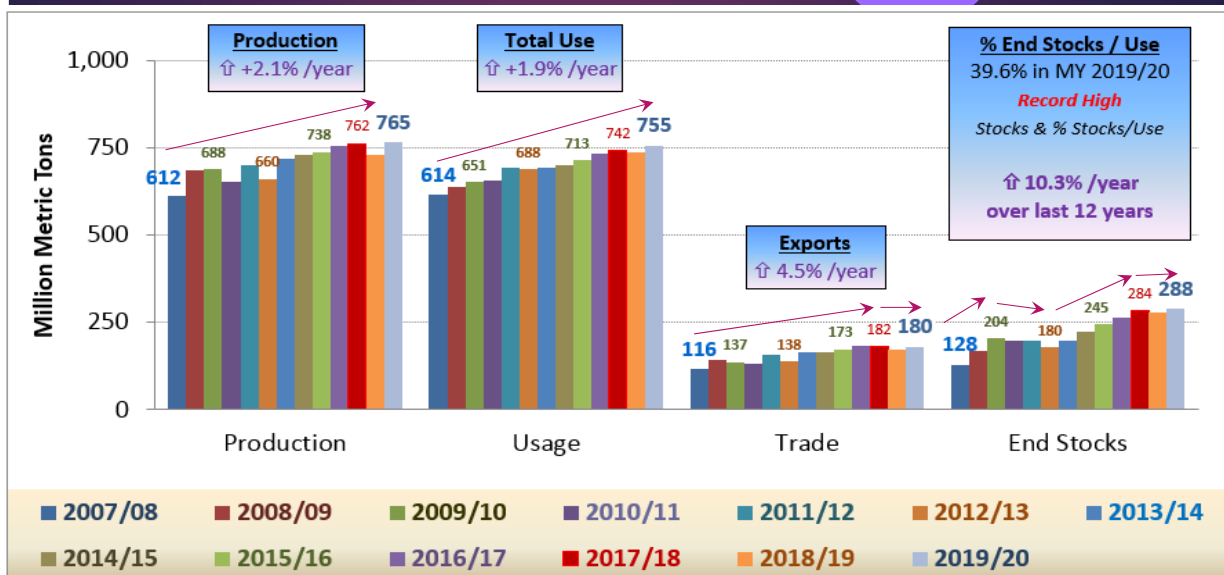
56

Large Supplies ⇒ Less of a “*Buyer’s Market*”

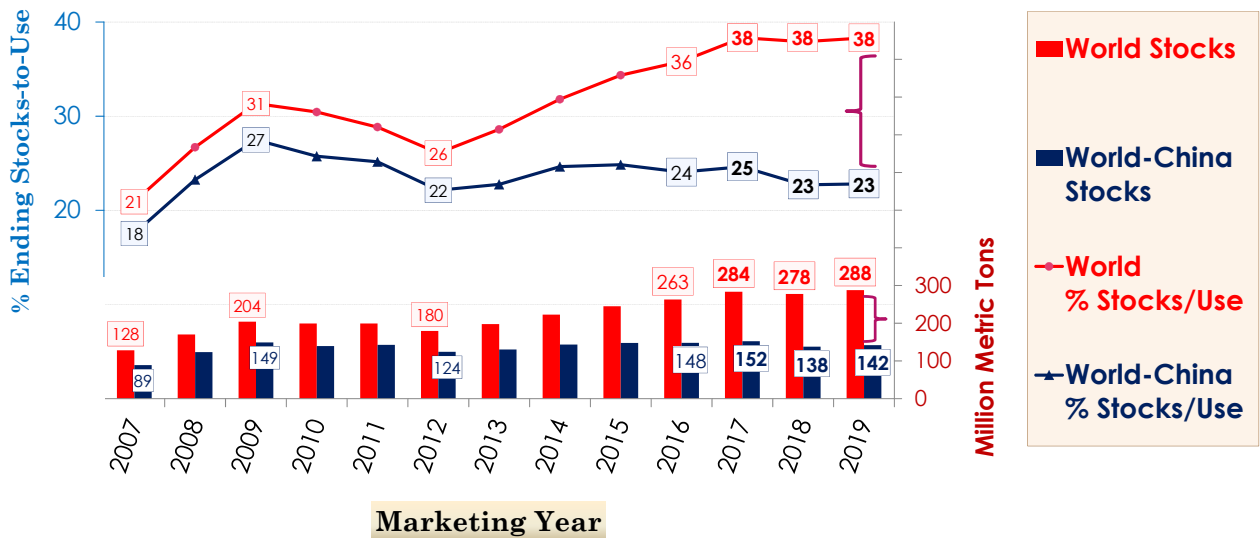
- **Record Supplies & Record Use** in MY 2019/20
 - **Production** ↑2.1% /yr vs **Use** ↑1.9% ⇒ **Stocks** ↑10.3% Since 2007/08
- **MY 2019/20 crops** ↑ - most nations (except Kazakhstan, Brazil, No. Africa)
- **Ongoing “competitive buying pressure”** in World Trade
 - Slowed growth in % End Stocks/Use since MY 2018/19
 - “Tighter” supplies from a “World-Less-China” perspective

World Wheat Supply, Use & Stocks

57

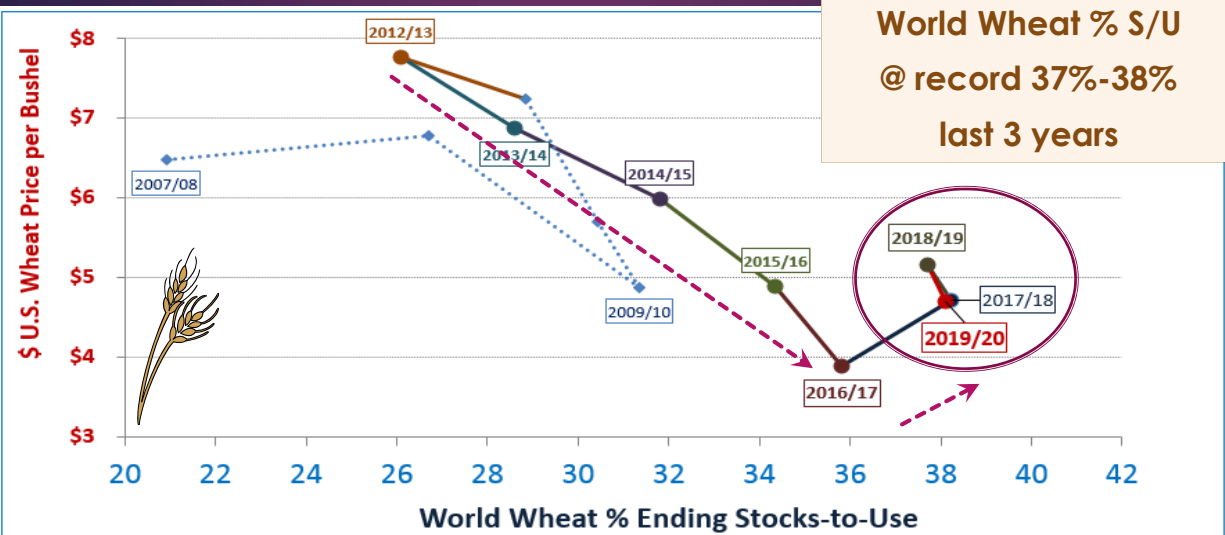


World & World-less-China Wheat Stocks & S/U



U.S. Wheat Price (\$) vs World % Stx/Use

MY 2007/08 – “New Crop” MY 2019/20

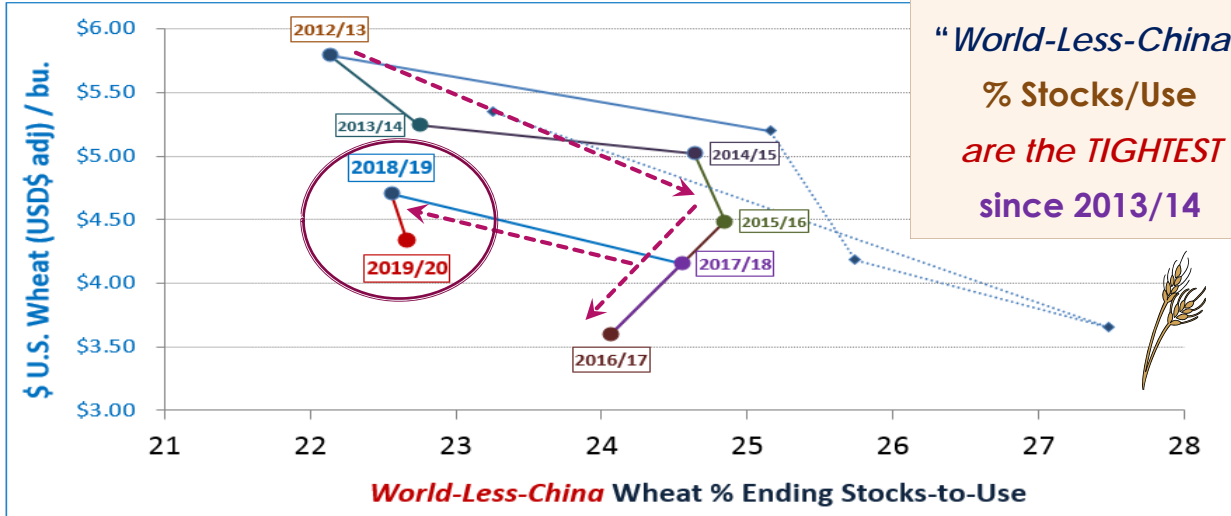


World Wheat % S/U @ record 37%-38% last 3 years

U.S. Wheat \$ vs Non-China % Stx/Use

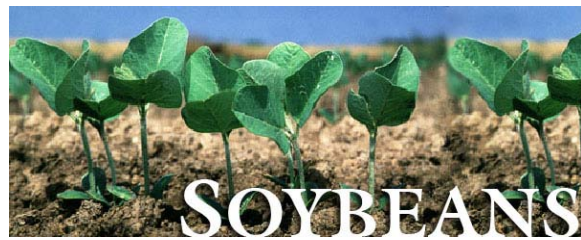
60

MY 1973/74 – “New Crop” MY 2019/20



Soybean Markets

61



KANSAS STATE UNIVERSITY

Department of Agricultural Economics

U.S. Soybean Market Prospects in 2018-19

62

A. U.S.-China Trade Dispute

- *HAS* affected U.S. Soybean export shipments, forward purchases & prices, with recent positive negotiation news

B. U.S. Exports forecast *down 17%+* vs 2-3 years ago highs

- Foreign buyer "*switching*" between *U.S.* & *South America*

C. Market Focus in Fall-Winter 2018-19

- **So. America** crops – response to China demand in 2019

U.S. Soybean & Cotton Stocks.....

63

• Soybean: Still "*Moderately Large*" Stocks & % S/U

- **End Stocks** ^{2019/20} ⇒ 460 mln bu (*Down vs 913 mb last year*)
- **% Stocks/Use** ^{2019/20} ⇒ 11.4% S/U (*Down vs 23.0% last year*)

• Cotton: *Large* % Stocks/Use & Lower \$'s in MY 2019/20

- **Production** ^{2019/20} ⇒ 21.7 mln bales (*18.4 & 20.9 mb last 2 years*)
- **End Stocks** ^{2019/20} ⇒ 7.0 mln bales (*4.85 & 4.2 mb last 2 years*)
- **% Stocks/Use** ^{2019/20} ⇒ 35.9% S/U (*27.3% & 21.5% last 2 years*)

CME Soybean Futures

64



Weekly Chart: September 2014 through October 22, 2019 a.m.

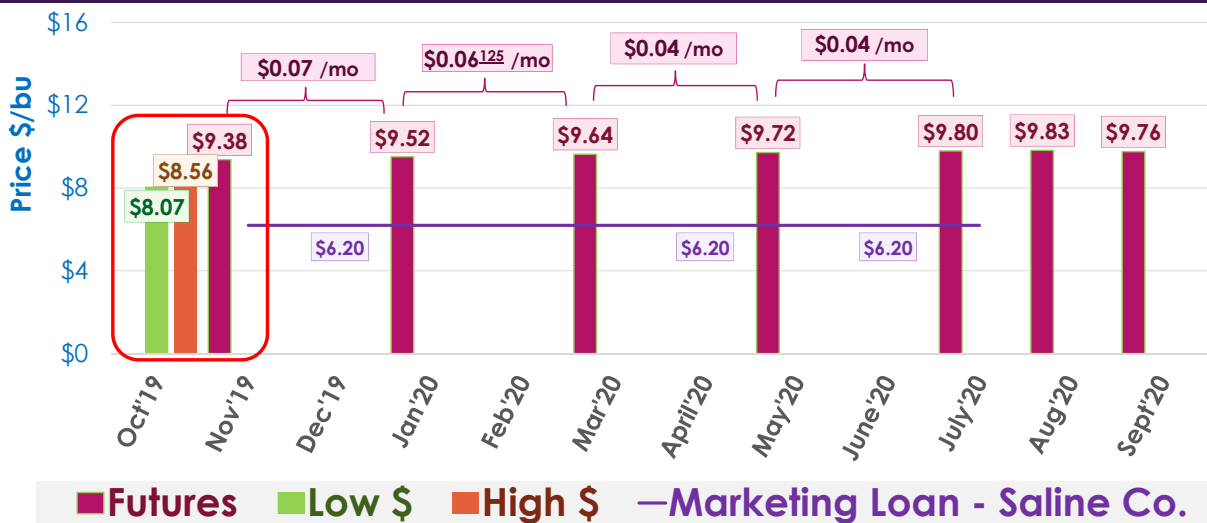


Soybean Cash & Futures Price \$'s

65



Salina, KS Local Elevators - October 22, 2019 a.m.

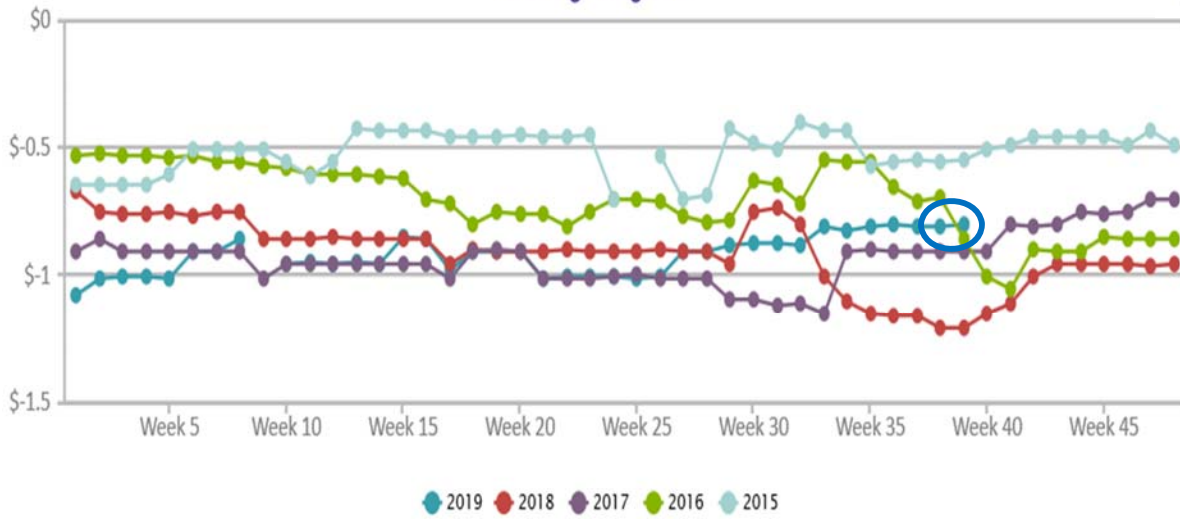


SALINA, KS: Soybeans Basis - CARGILL

66



www.AgManager.info



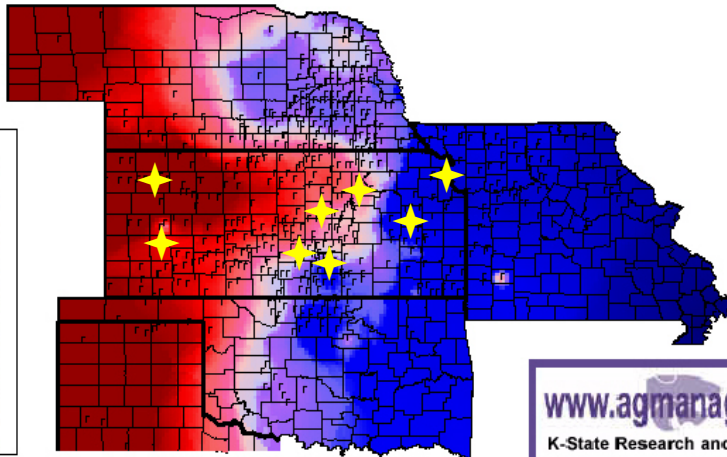
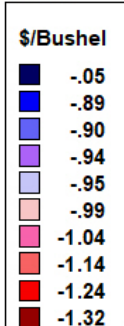
Soybean Basis, 10-16-2019

67



Basis = Cash Price - Nearby Futures Price

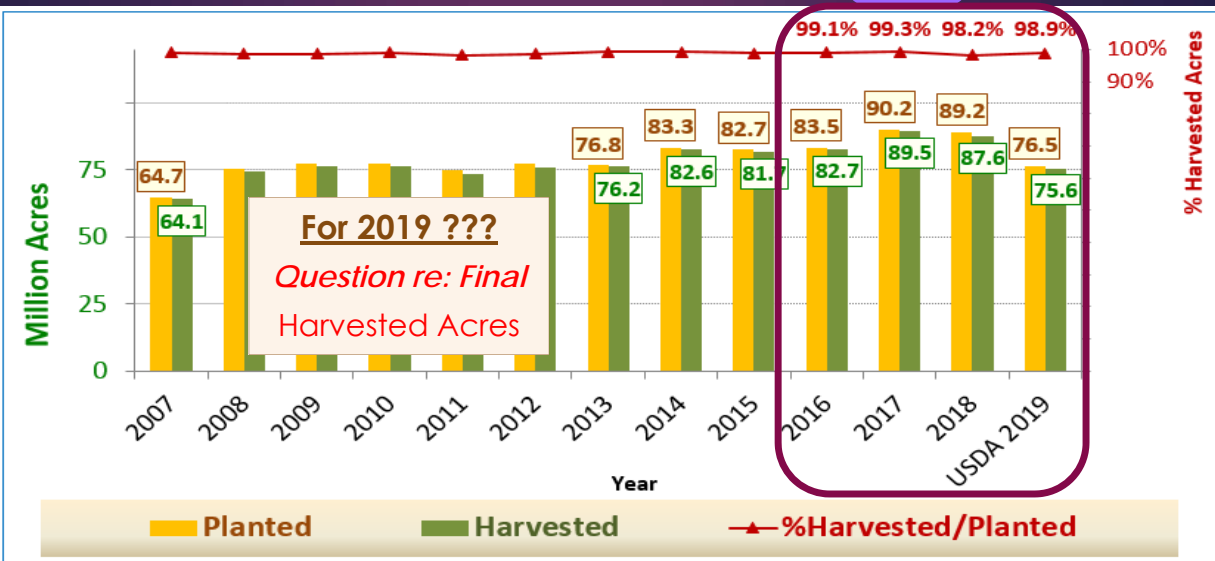
CBT Nov
Futures
Price: \$9.28



www.agmanager.info
K-State Research and Extension

U.S. Soybean Acreage

68

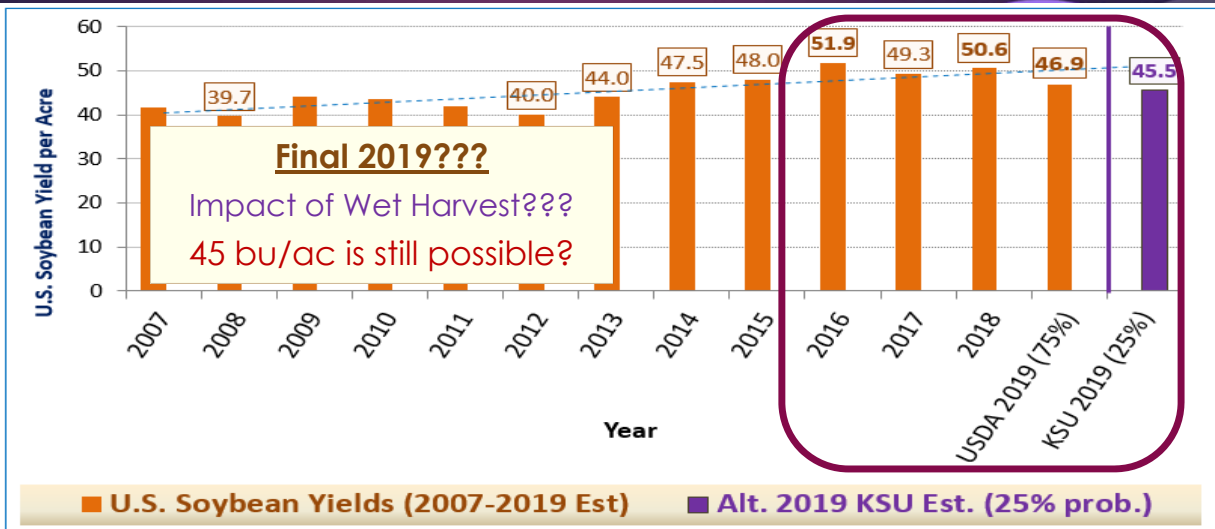


U.S. Soybean Yields

69

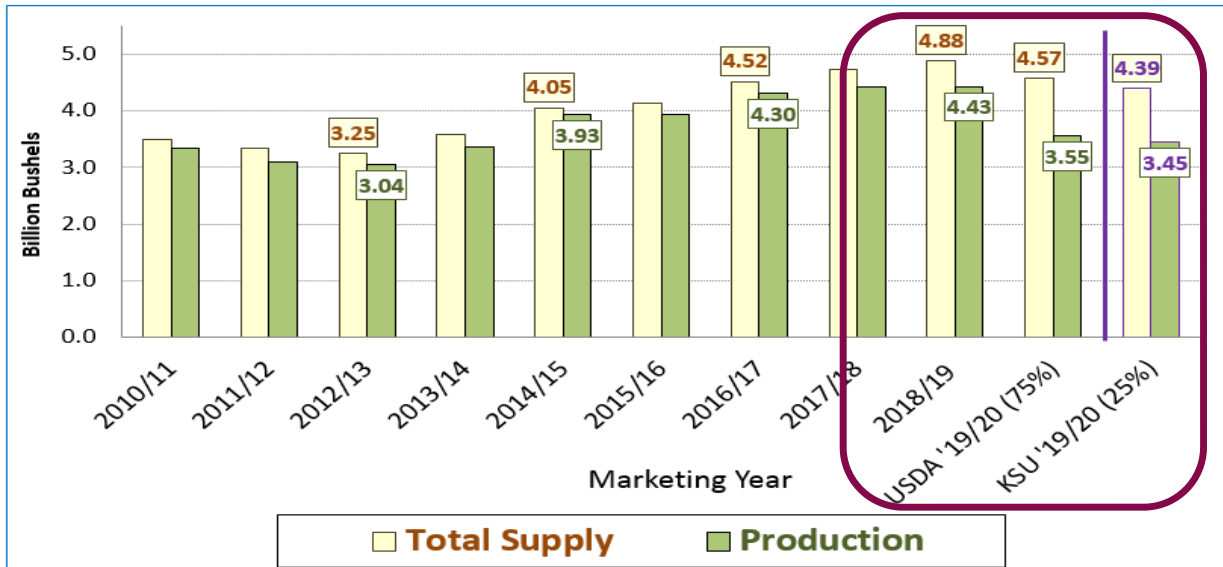


USDA 2019 = 46.9 bu/ac



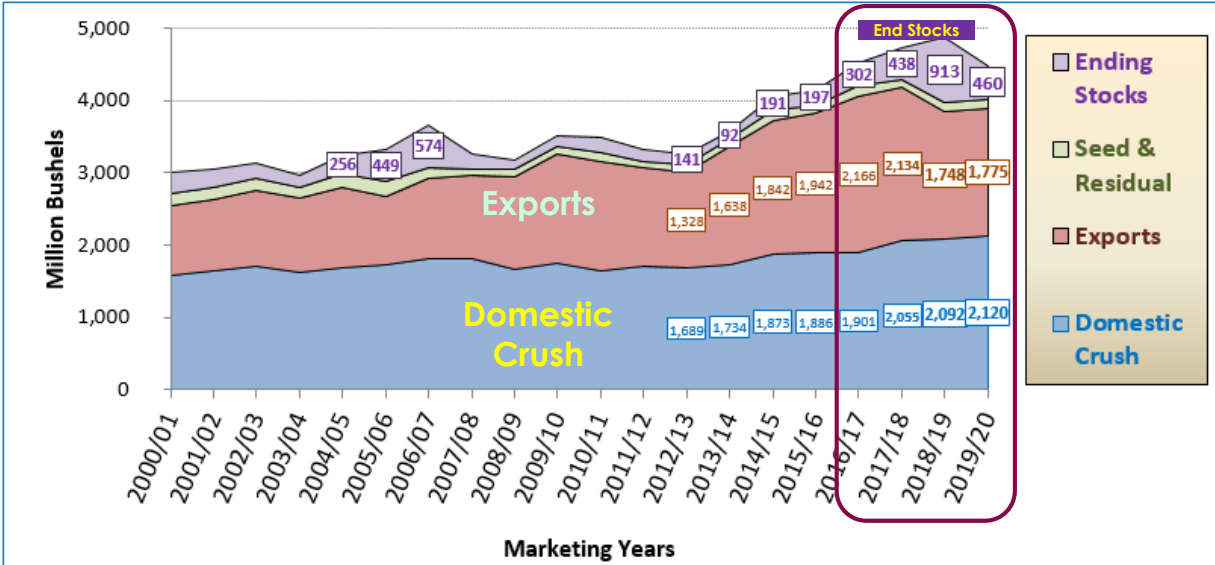
U.S. Soybean Production & Supplies

70



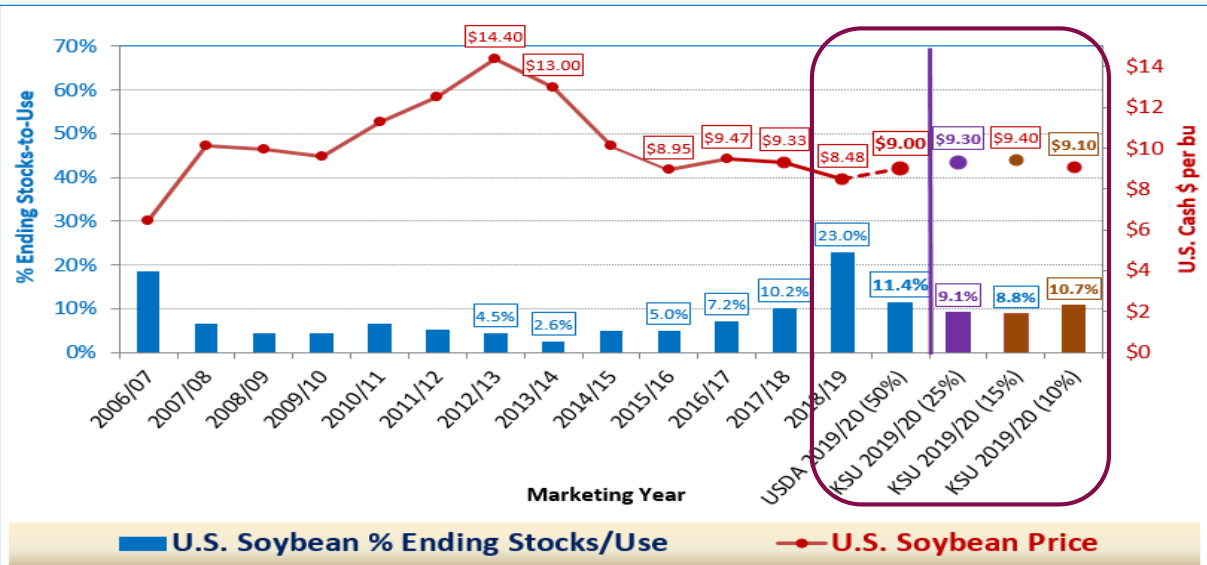
U.S. Soybean Use & End Stocks

71



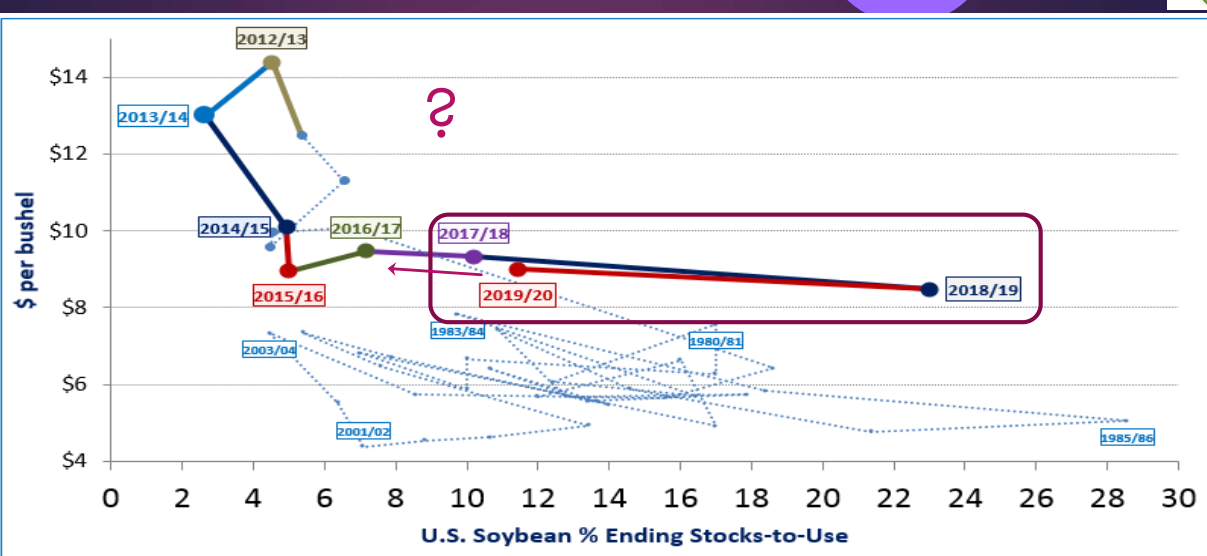
U.S. Soybean % Stocks/Use vs Price\$

72



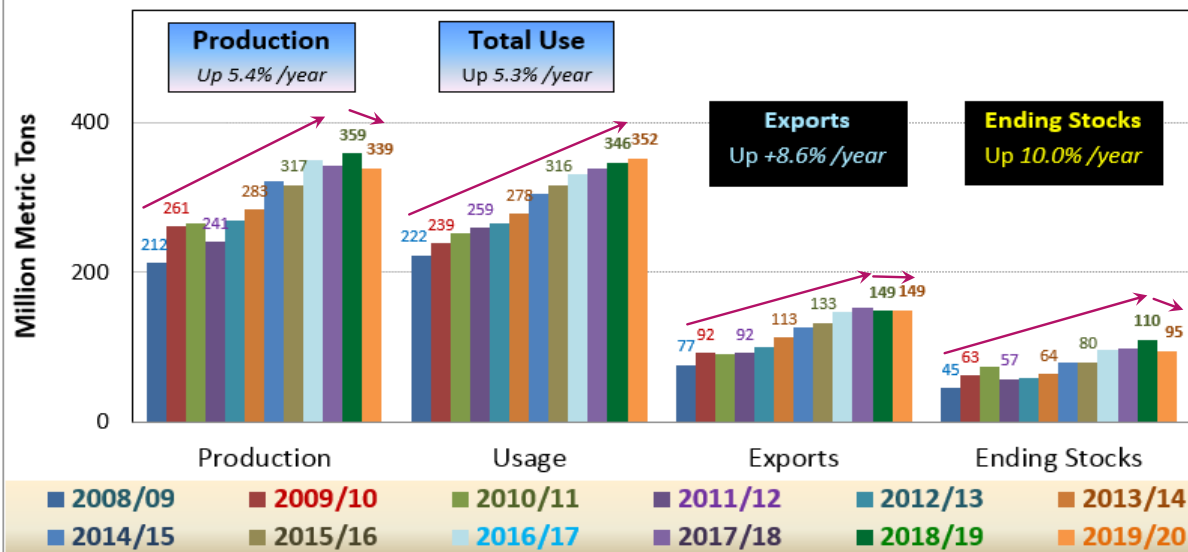
U.S. Soybean % Stocks/Use vs Price\$

73



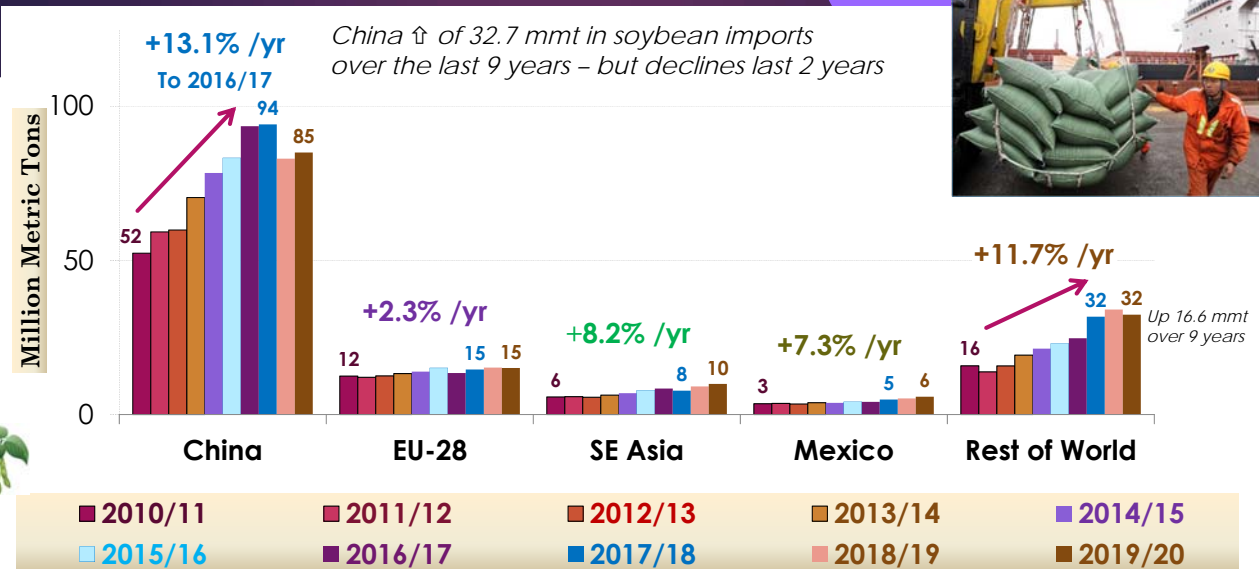
World Soybean Supply, Use & Stocks

74



Soybean Importer Purchases

75

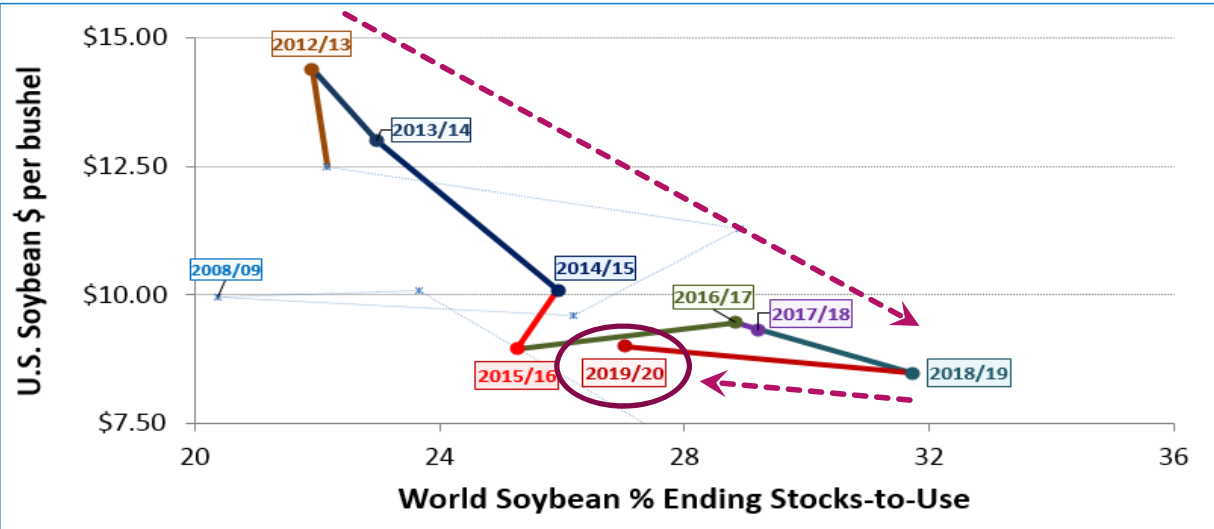


U.S. Soybean \$ vs World %Stx/Use

76



MY 2007/08 through "New Crop" MY 2019/20



Questions?

Daniel O'Brien – Extension Ag Economist

Blog: www.ksugrains.wordpress.com

KSUGrains on Twitter

www.AgManager.info



KANSAS STATE UNIVERSITY

Department of Agricultural Economics