Grain Market Outlook for 2020

KSU Ag Econ 520

Kansas State University - Manhattan, Kansas

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Department of Agricultural Economics

Unpredictable Grain Markets in 2019-20 2

❑ The *"Ups & Downs"* of U.S. Trade Tensions

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

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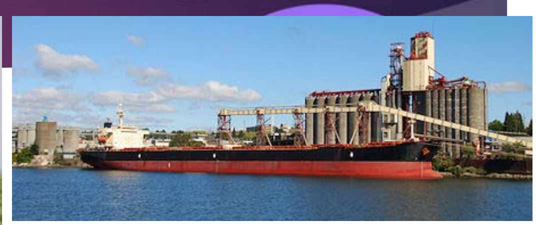

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U.S. Corn & Sorghum Stocks…..

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- **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*)

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CME Corn Futures

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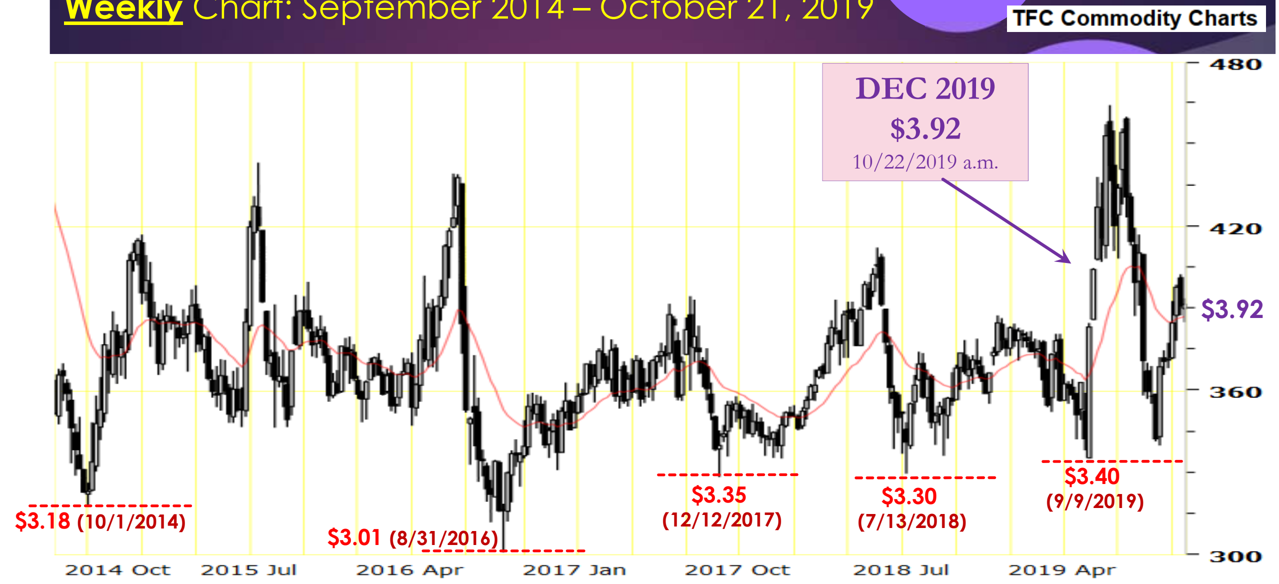
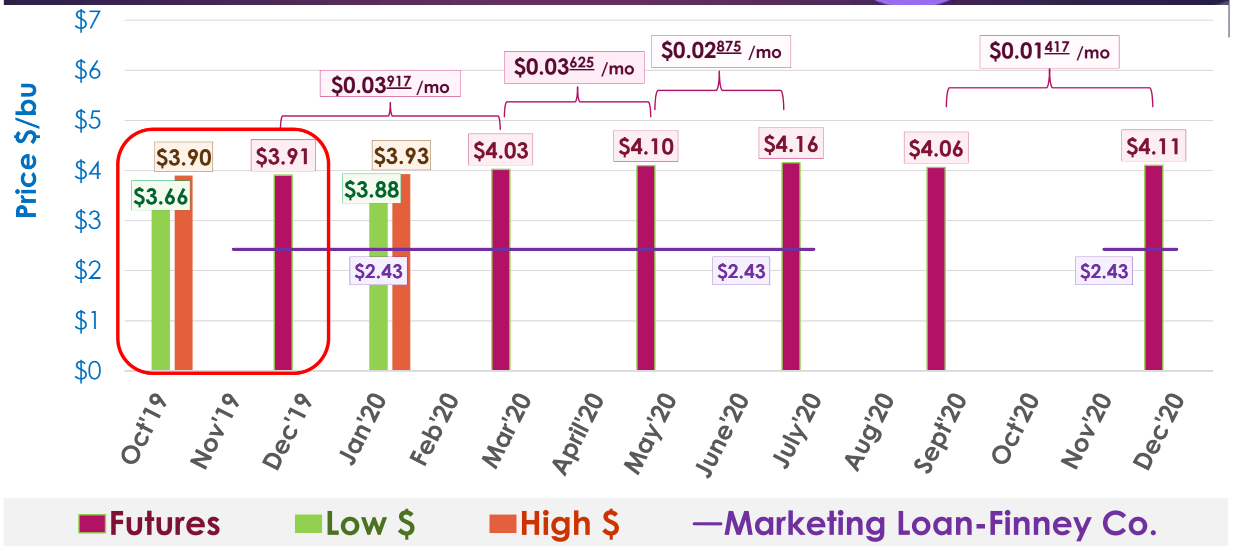
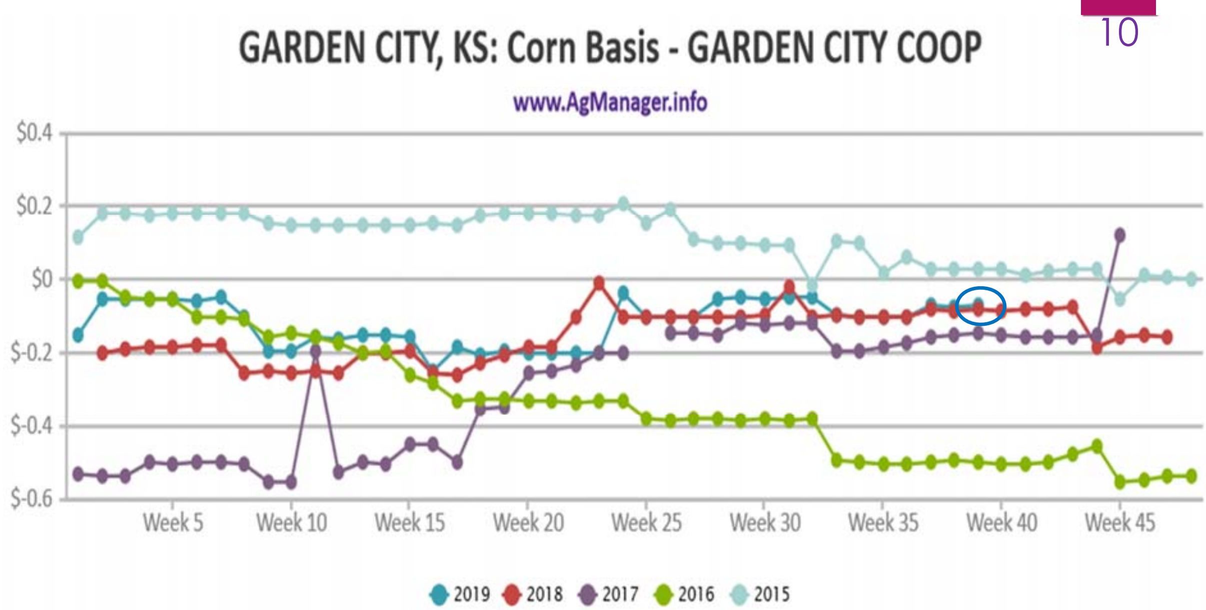
Weekly Chart: September 2014 – October 21, 2019



Corn Cash & Futures $'s

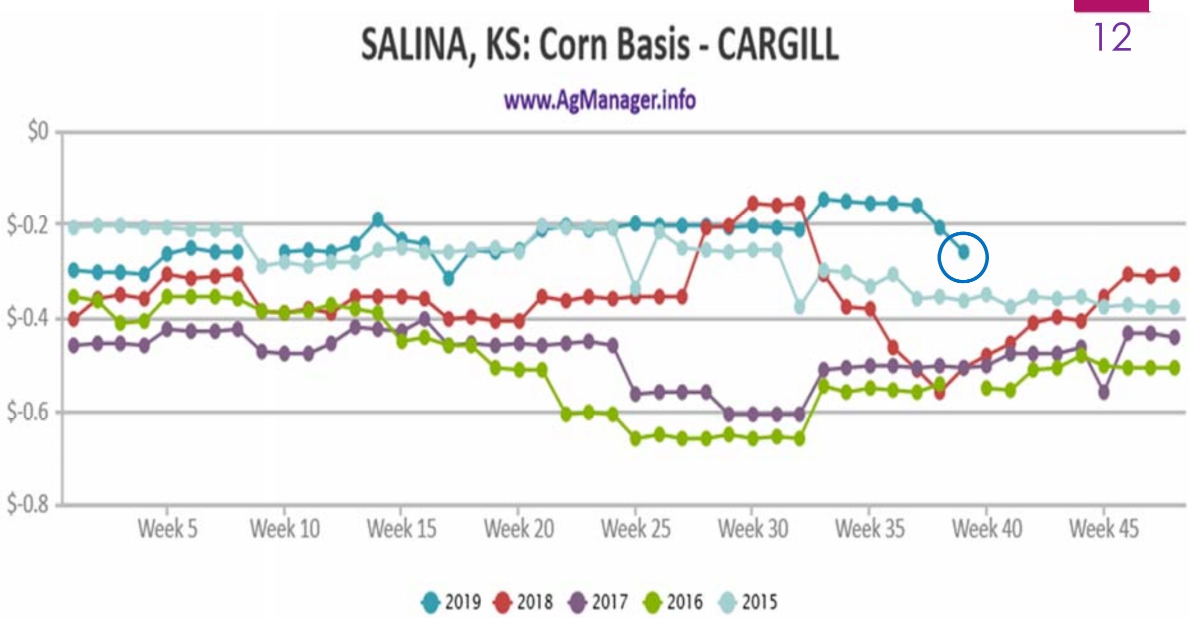
Garden City, KS Local Elevators – October 21, 2019





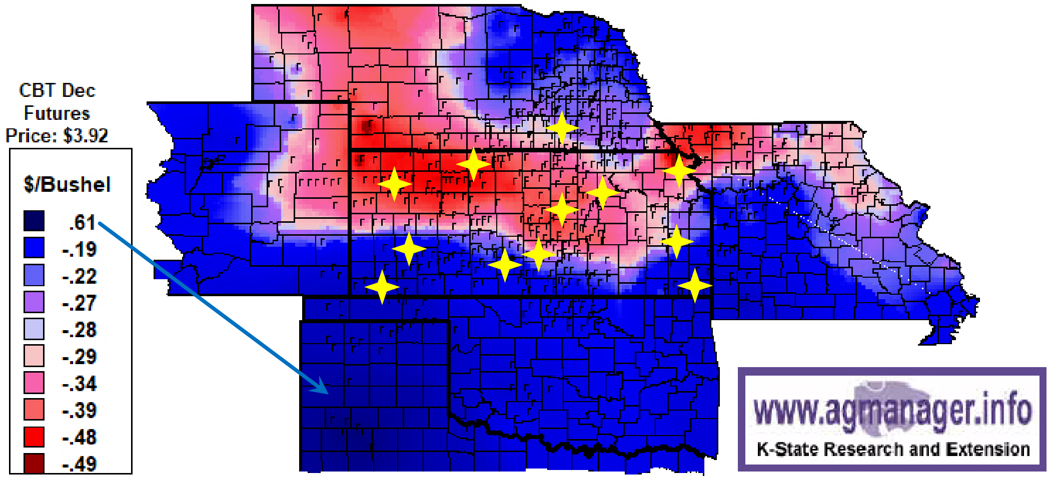
Corn Cash & Futures $'s

Salina, KS Local Elevators – October 21, 2019



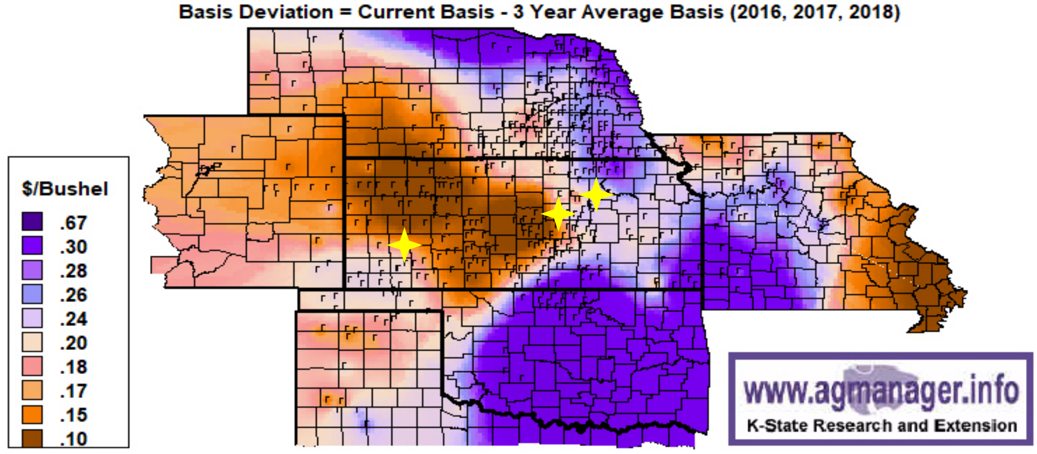
Corn Basis, 10-16-2019

Basis = Cash Price - Nearby Futures Price



Corn Basis Deviation, 10-16-2019

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



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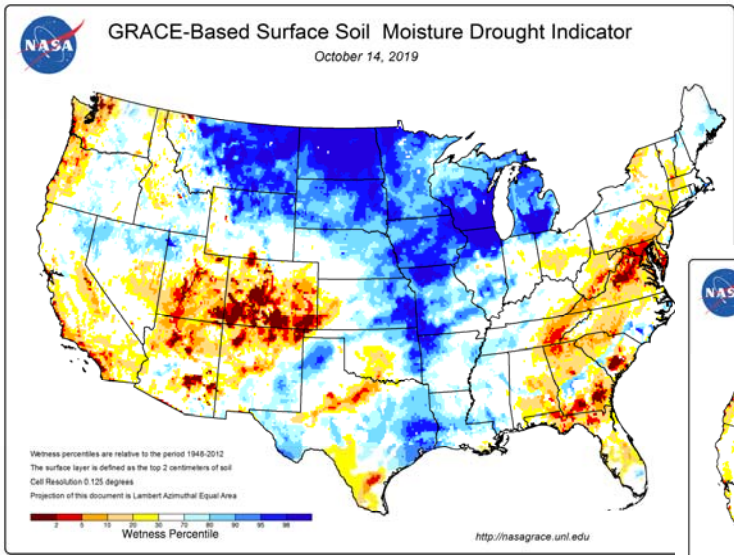

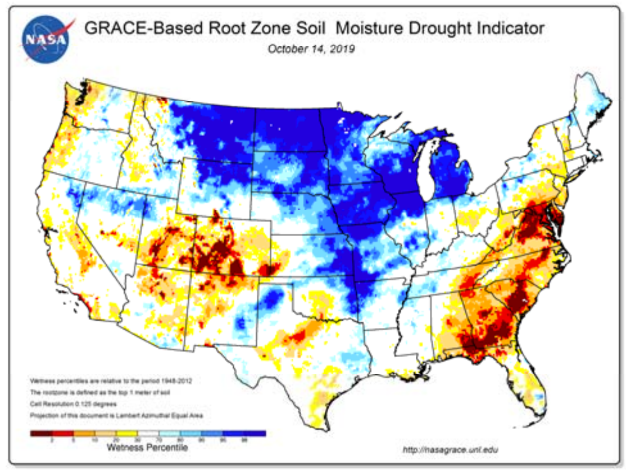

U.S. Corn Acreage

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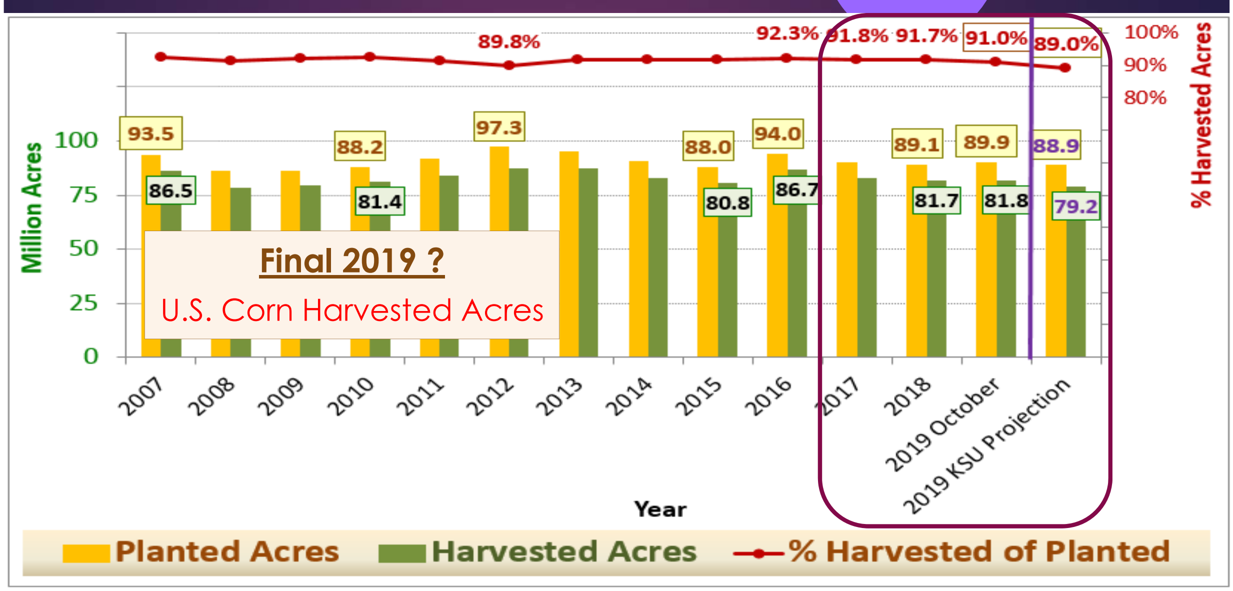
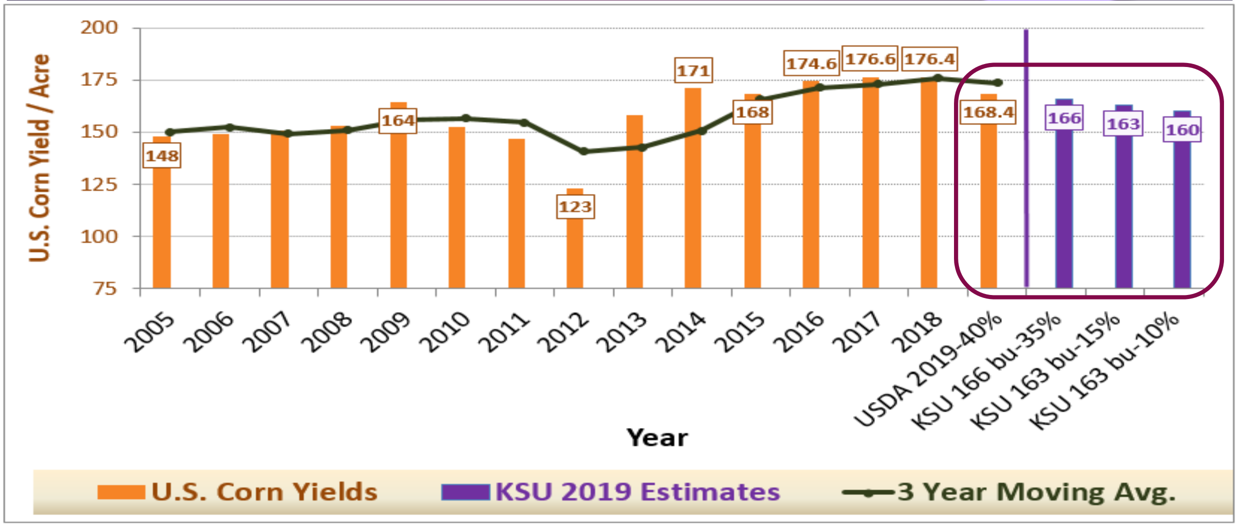
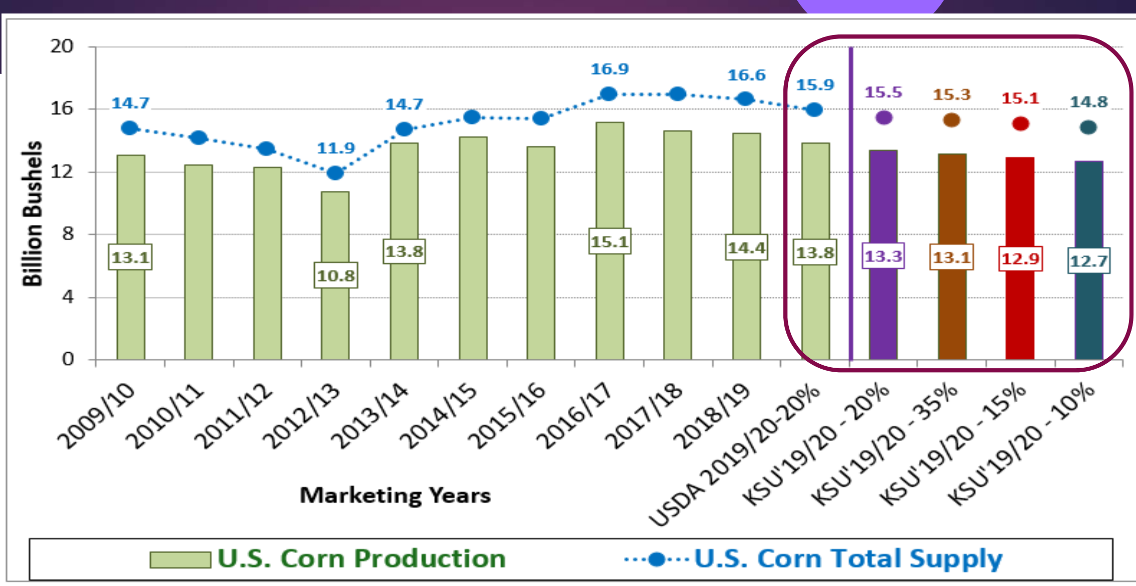


U.S. Corn Yields

USDA 2019 USDA Forecast = 168.4 bu/ac



U.S. Corn Production & Supplies



U.S. Corn Use – By Category

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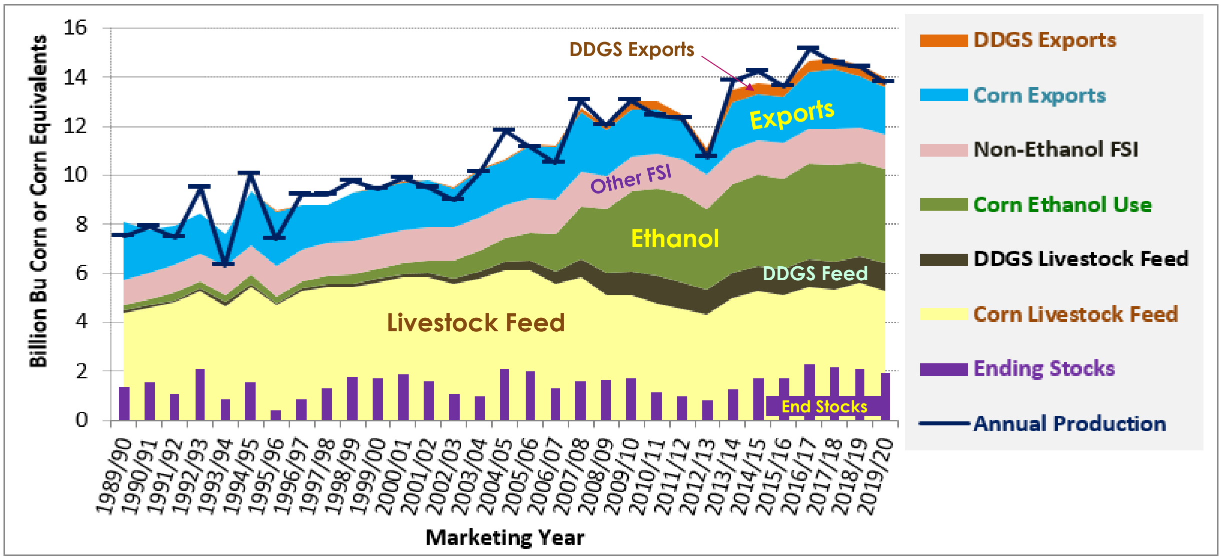

U.S. Corn Ending Stocks & % Stx/Use

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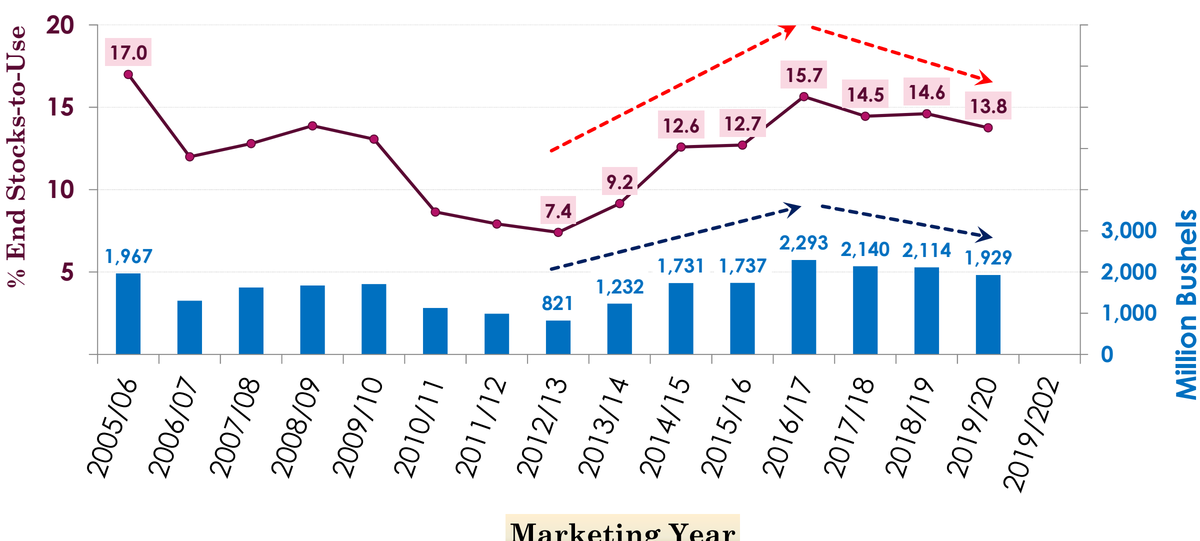
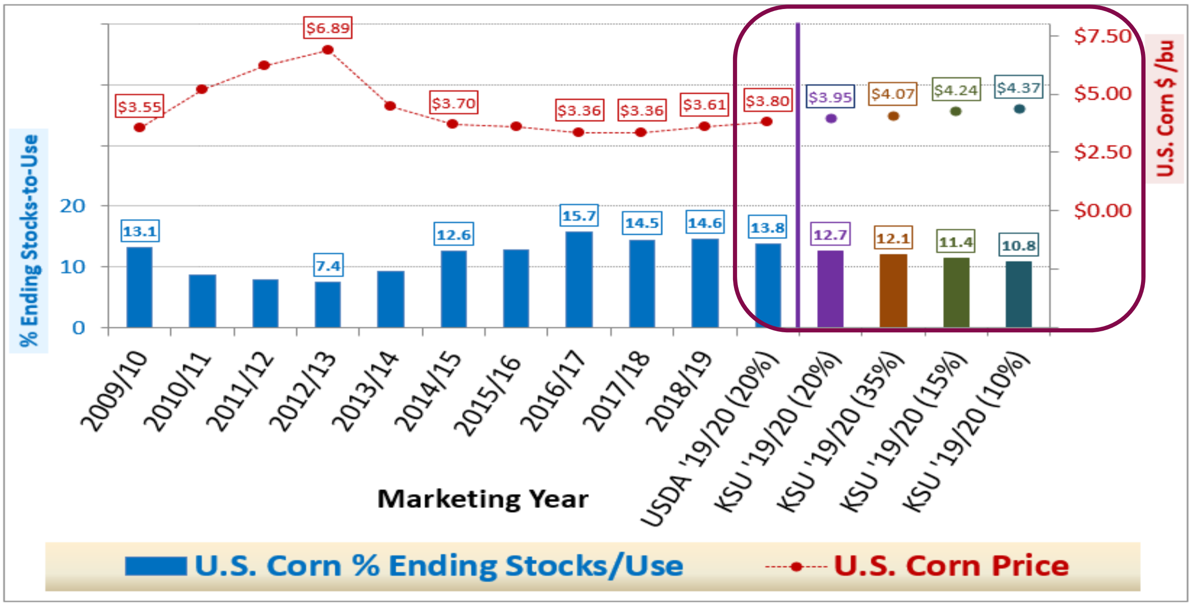


U.S. Corn % Stocks/Use vs Price$



Item	USDA 2019/20 10/10/2019 WASDE	Scenario #1 MY 2019/20 88.9942 mln Planted Acres 89.0% Hvst/Plntd Ac & 168.2 bu/ac Yield + Use Rationing	Scenario #2 MY 2019/20 88.9942 mln Planted Acres 89.0% Hvst/Plntd Ac & 166.0 bu/ac Yield + Use Rationing	Scenario #3 MY 2019/20 88.9942 mln Planted Acres 89.0% Hvst/Plntd Ac & 163.0 bu/ac Yield + Use Rationing	Scenario #4 MY 2019/20 88.9942 mln Planted Acres 89.0% Hvst/Plntd Ac & 160 bu/ac Yield + Use Rationing
% Probability of Occurring (KSU)	*20%* KSUest	*20%* KSUest	*35%* KSUest	*15%* KSUest	*10%* KSUest
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
			Million Bushels		
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$

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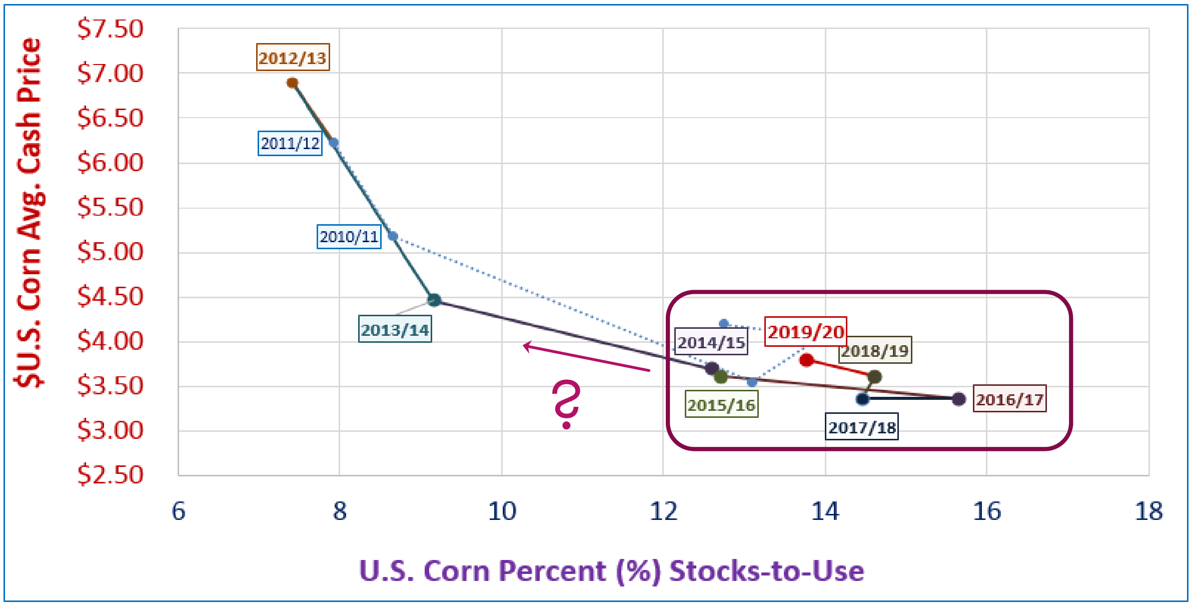

World Corn Supply, Use & Stocks

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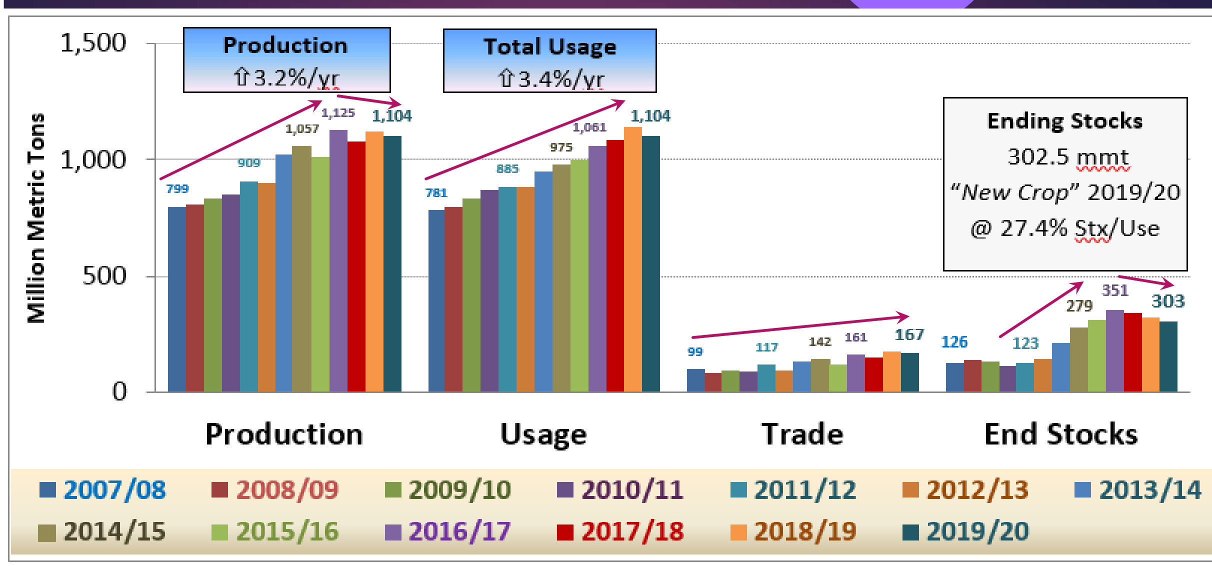
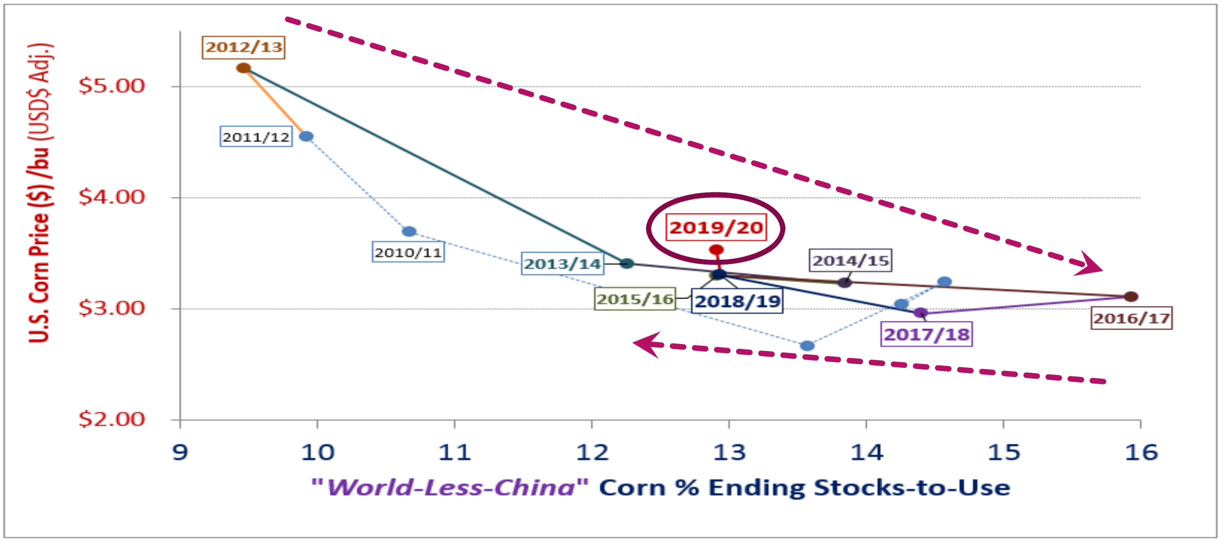


U.S. Corn $USD-adj vs World Less China %Stx/Use

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



Wheat Markets

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U.S. Wheat Stocks.....

- **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.....

- **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…..

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

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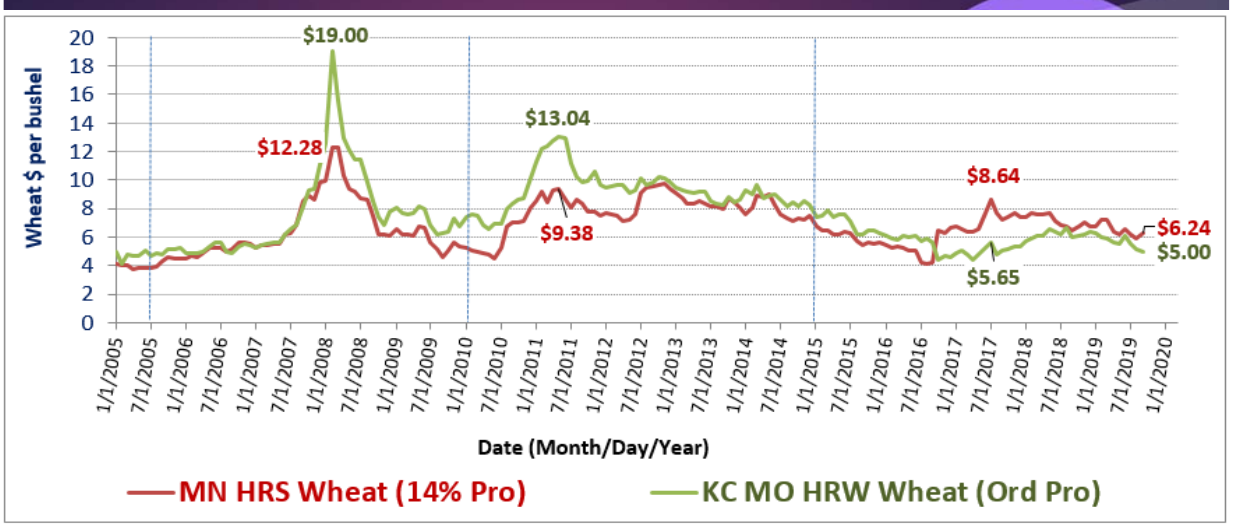
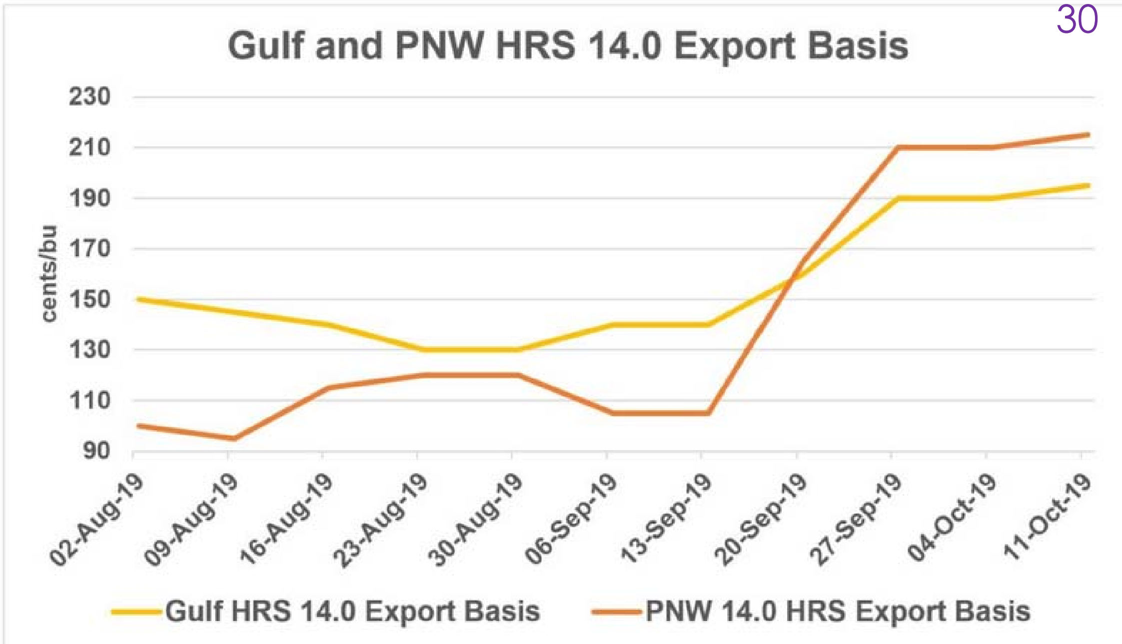
Prices for HRS Wheat 14% Protein (Minneapolis, MN) vs HRW Wheat – Ordinary Protein (Kansas City, MO)

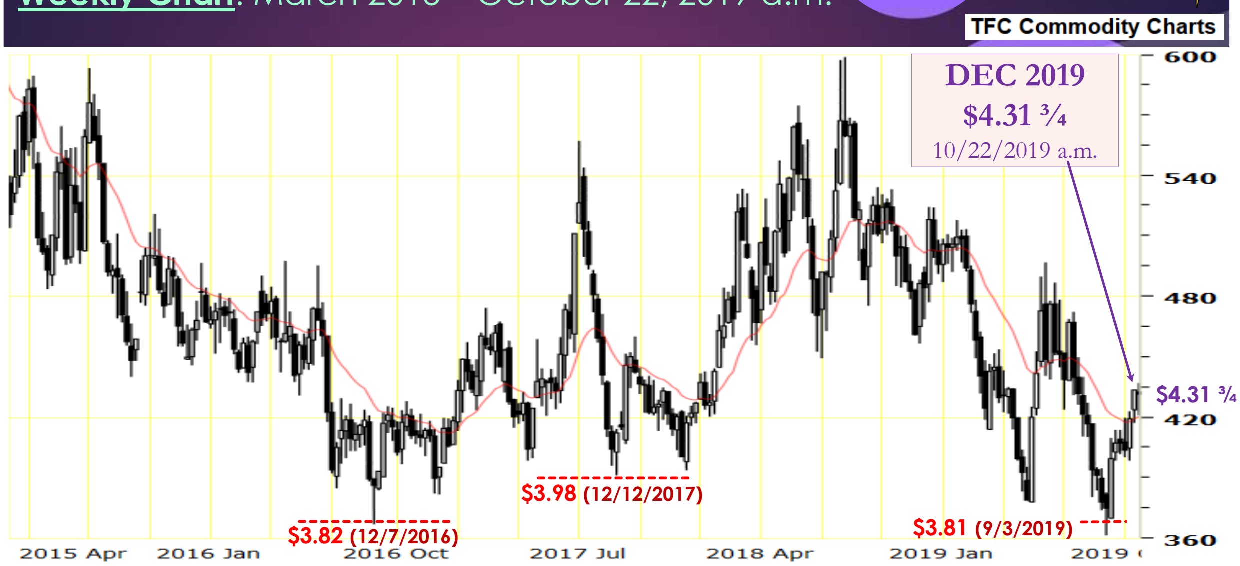




Source: U.S. Wheat Associates Price Report, Oct. 4, 2019

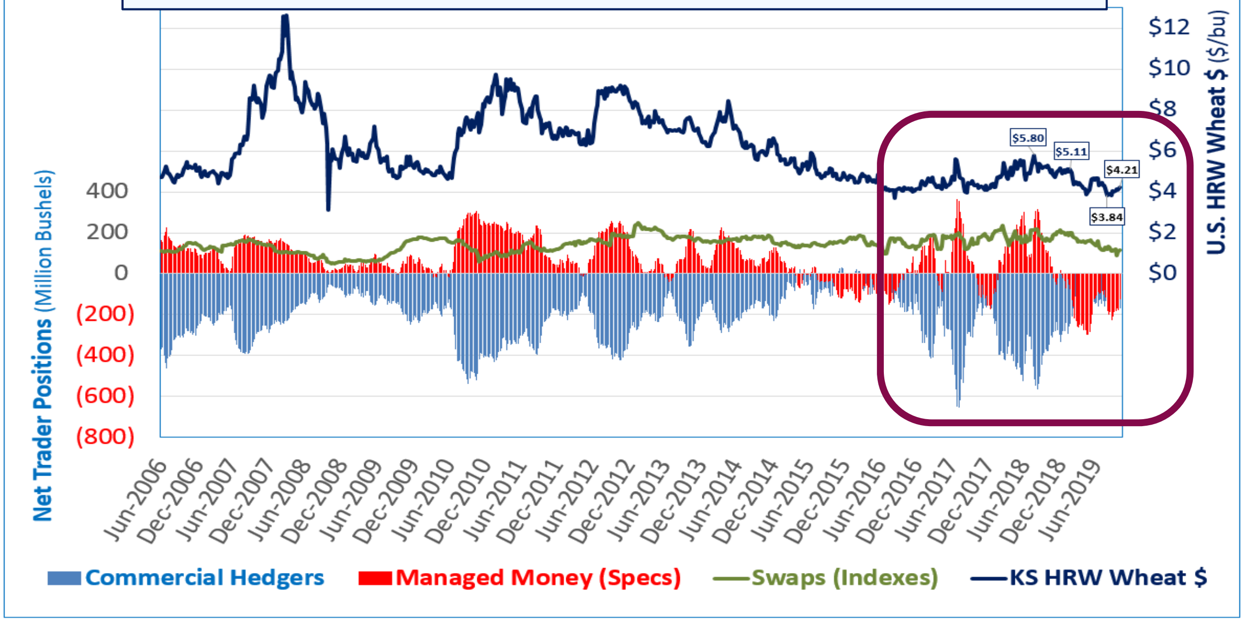
CME Kansas Hard Red Winter Wheat

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



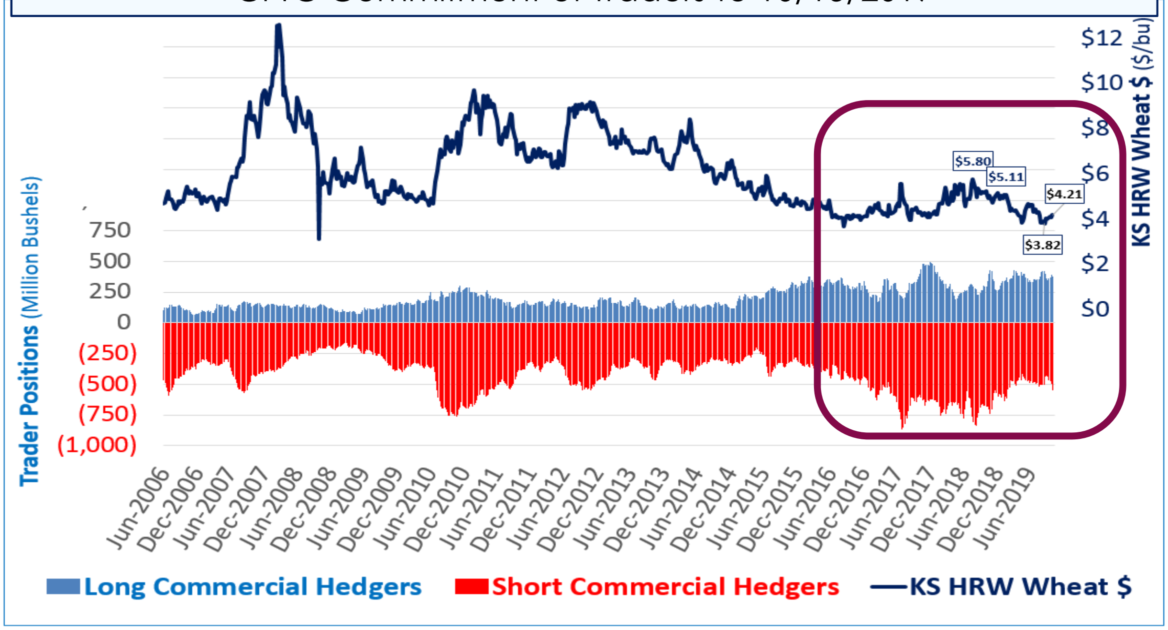
Net Position of Traders in CME KS HRW Wheat

CFTC Commitment of Traders to 10/15/2019



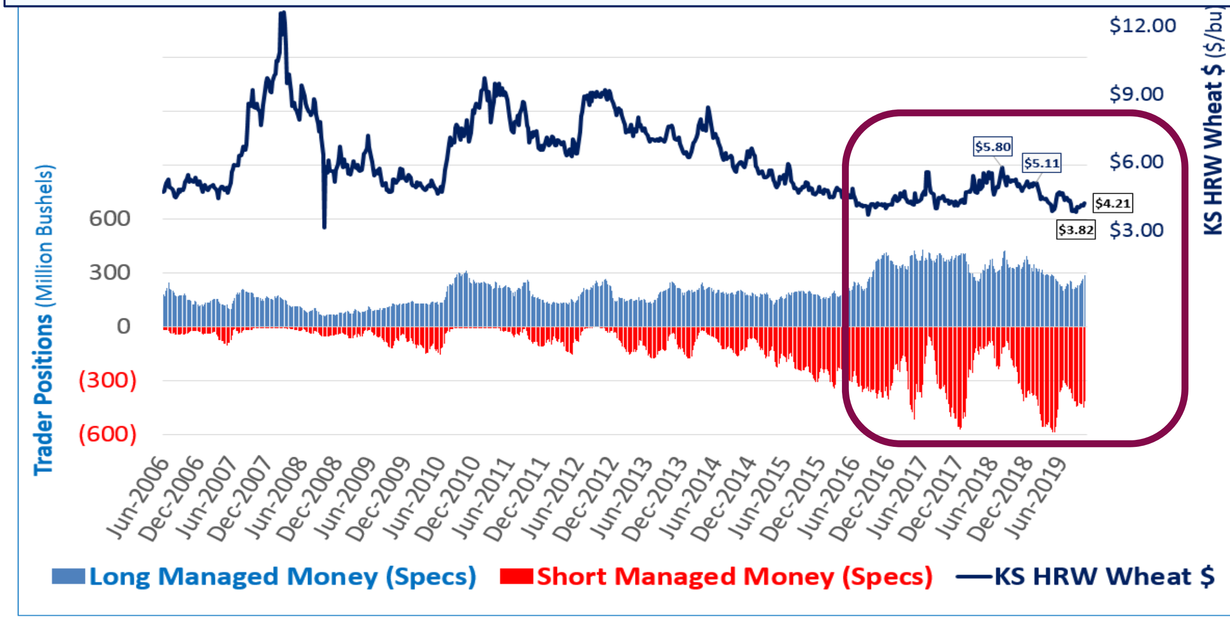
Commercial Hedge Positions in CME KS HRW Wheat

CFTC Commitment of Traders to 10/15/2019

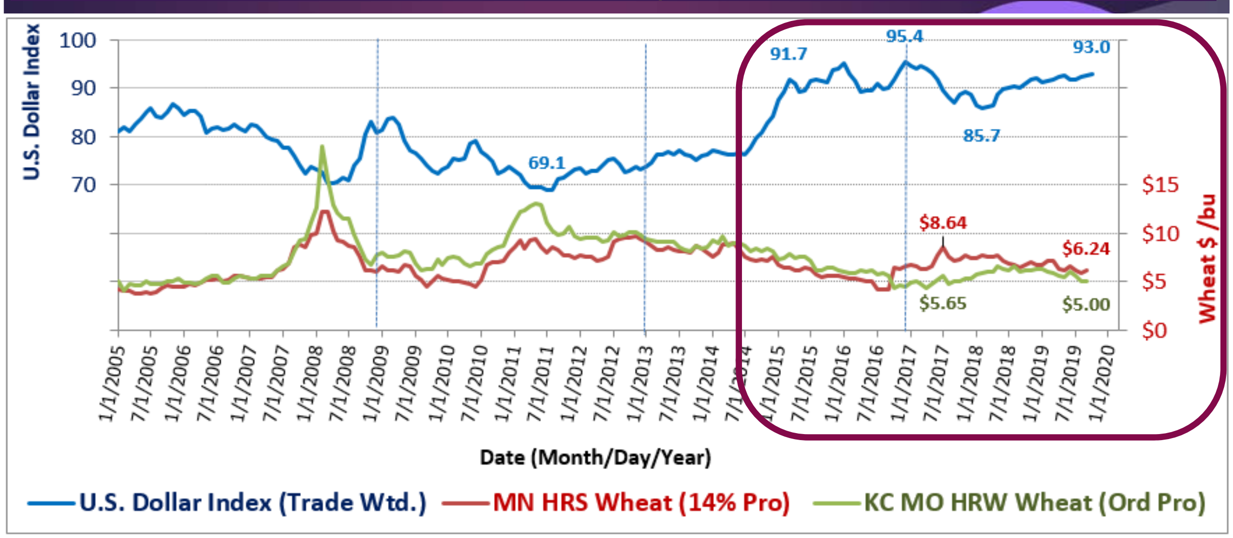


Managed Money (Spec) Positions in CME KS HRW Wheat

CFTC Commitment of Traders to 10/15/2019



U.S. Trade Weighted Dollar Index vs HRS & HRW Cash Prices (St. Louis Fed/FRED & USDA)



MGE HRS Wheat

TFC Commodity Charts

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Weekly Chart: March 2015 – October 21, 2019

CME Chicago Wheat

TFC Commodity Charts

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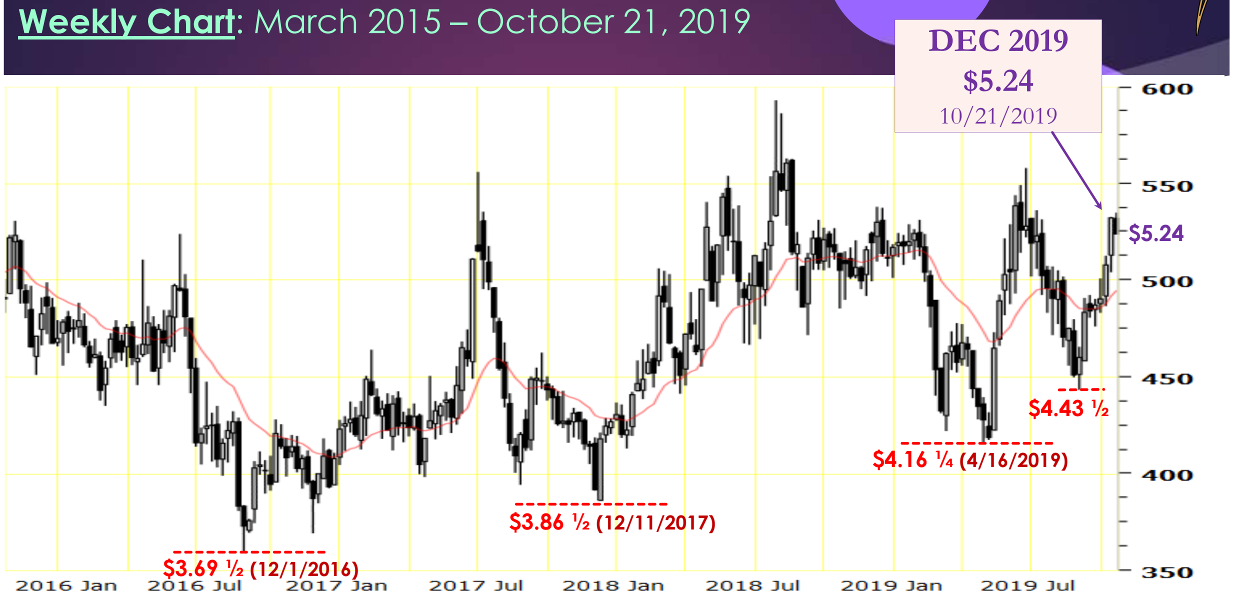
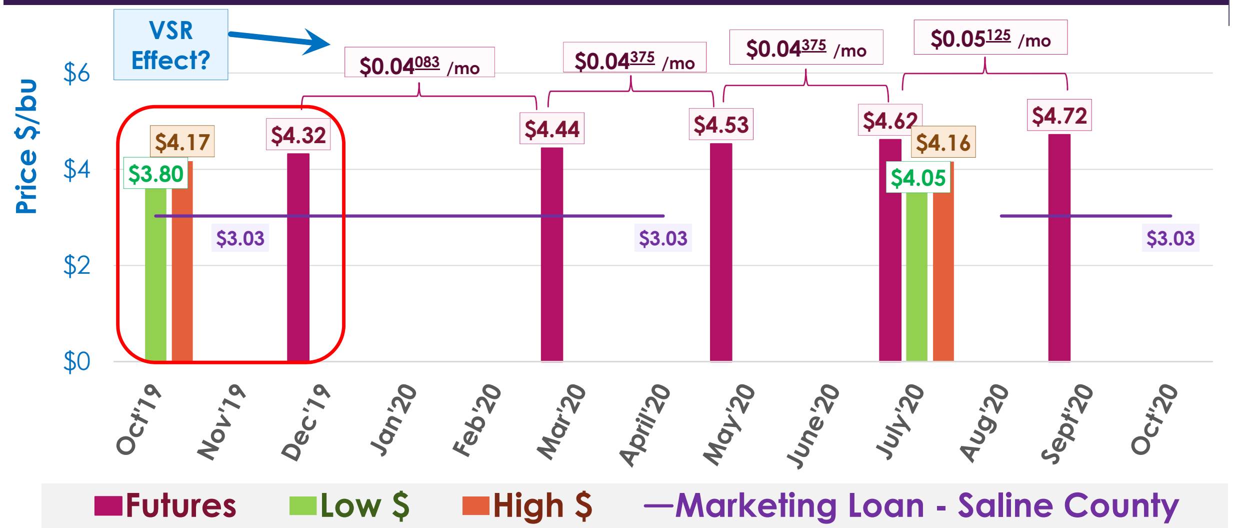
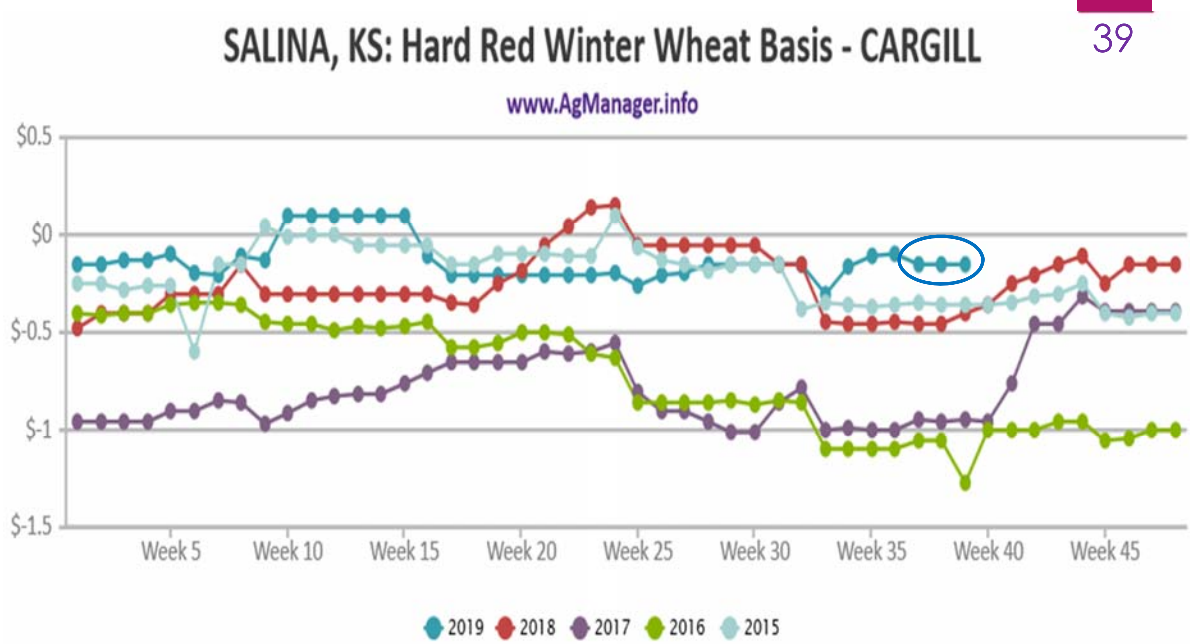
Weekly Chart: March 2015 – October 21, 2019



Wheat Cash & HRW Wheat Futures

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





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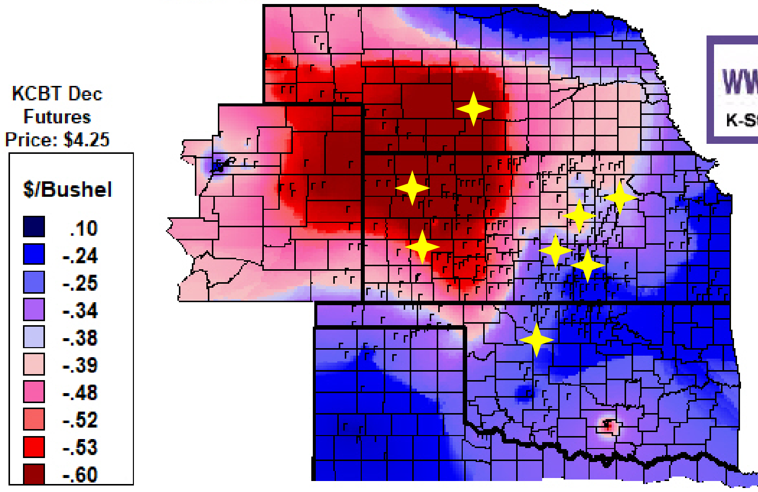
Wheat Basis, 10-16-2019

Basis = Cash Price - Nearby Futures Price



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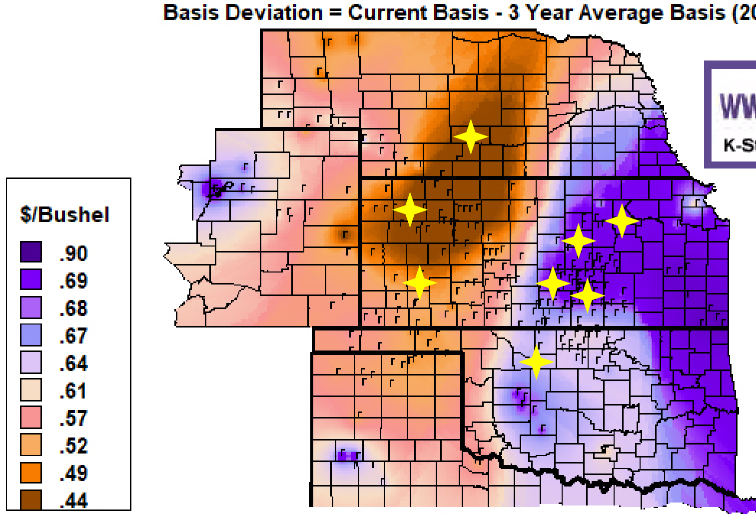
Wheat Basis Deviation, 10-16-2019

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



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U.S. Wheat Seeded Acreage

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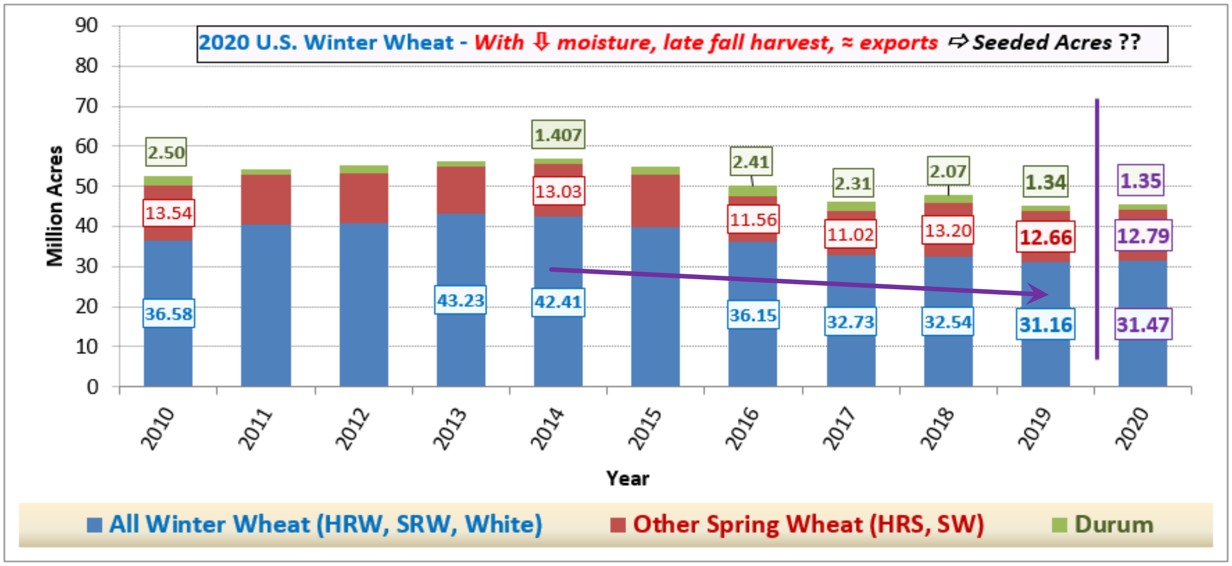

U.S. Wheat Planted & Harvested Acres

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U.S. Wheat Yields

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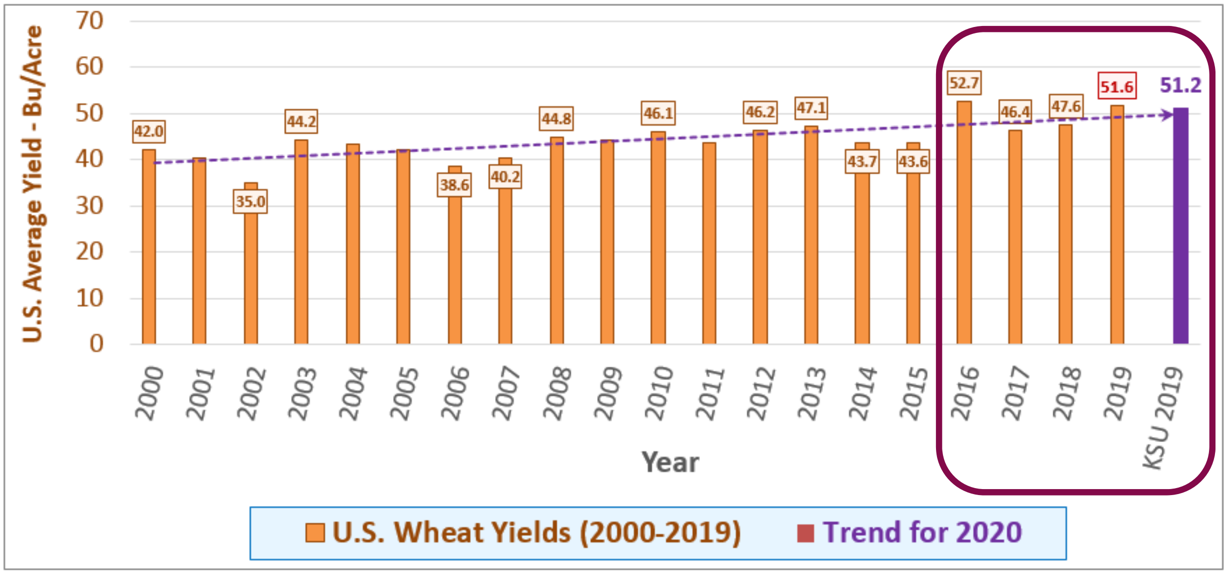

U.S. Wheat Production & Supplies

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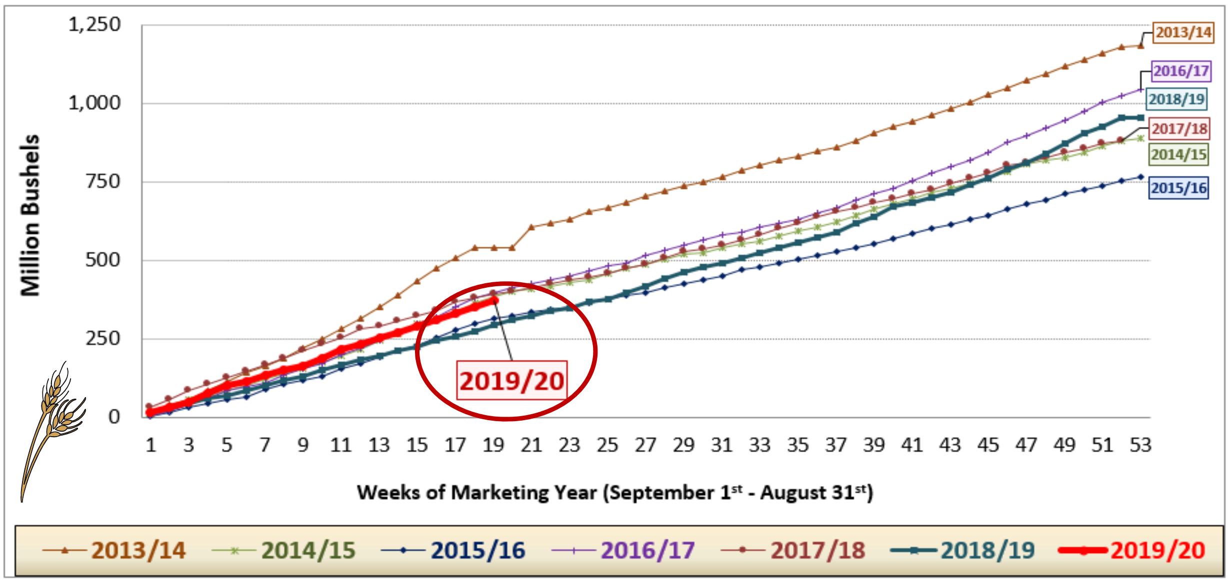
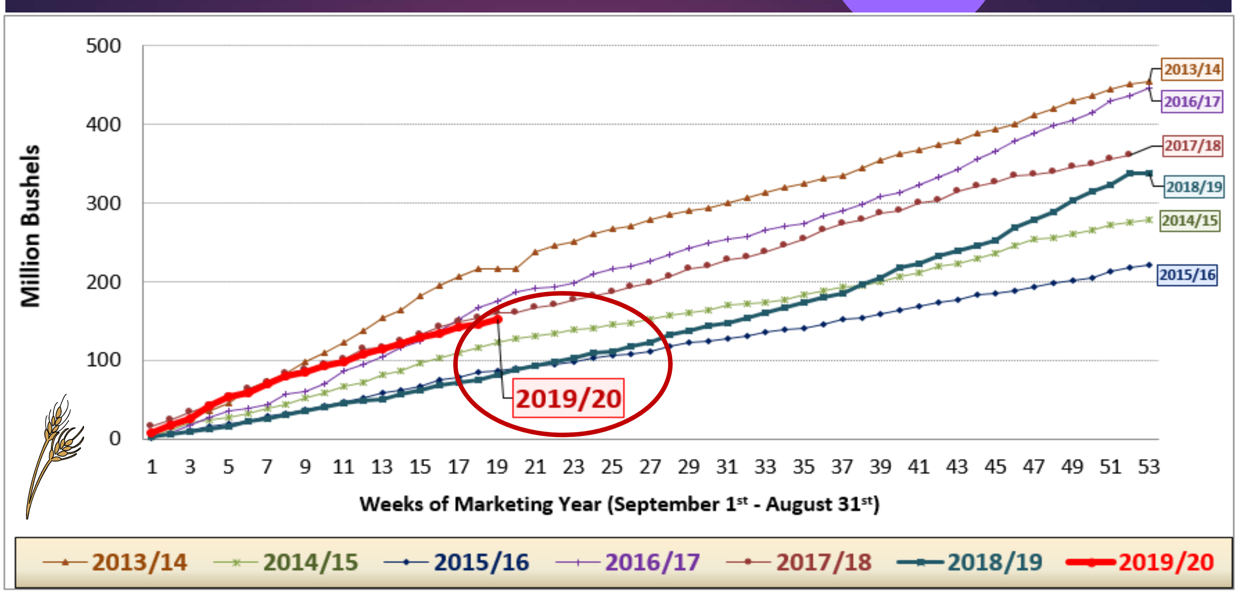
U.S. All Wheat Exports – Weekly thru October 10, 2019

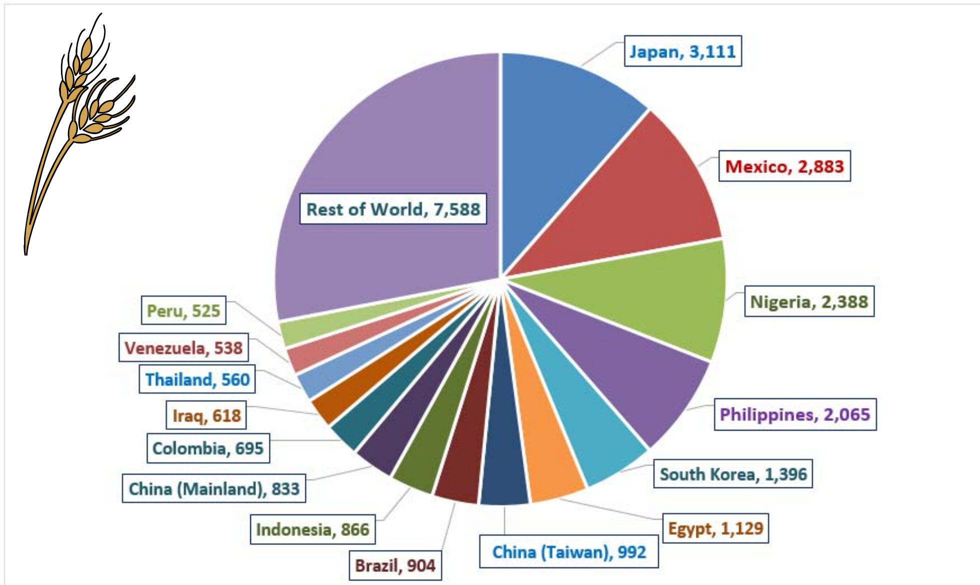


U.S. HRW Wheat Exports – Weekly thru October 10, 2019



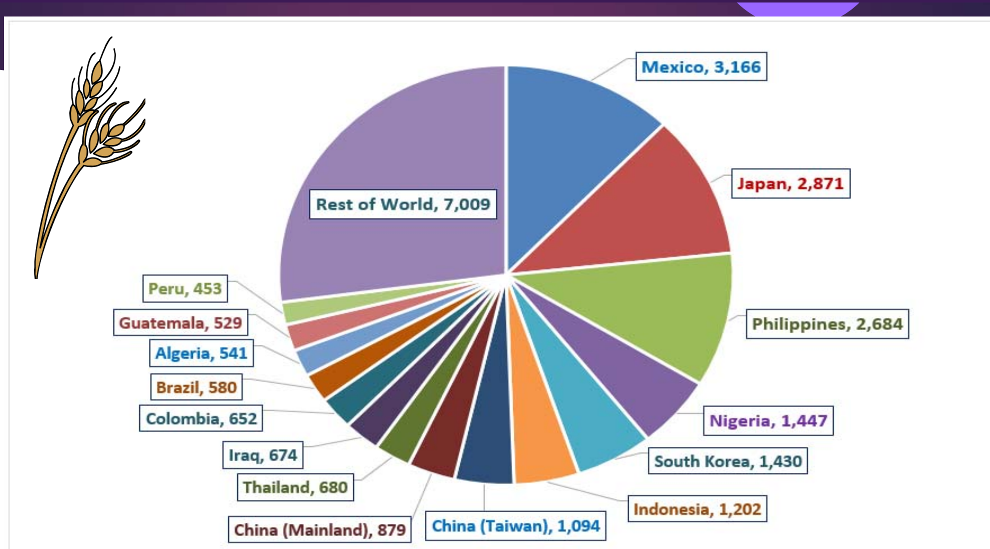
Top 15 U.S. Wheat Export Buyers – Last **12** years

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



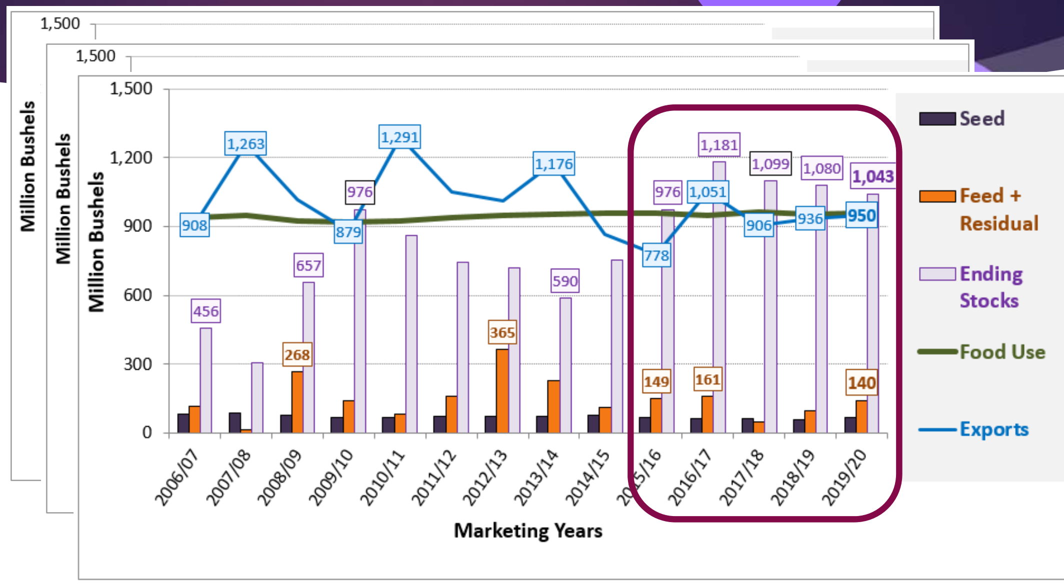
Top 15 U.S. Wheat Export Buyers – Last **3** years

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



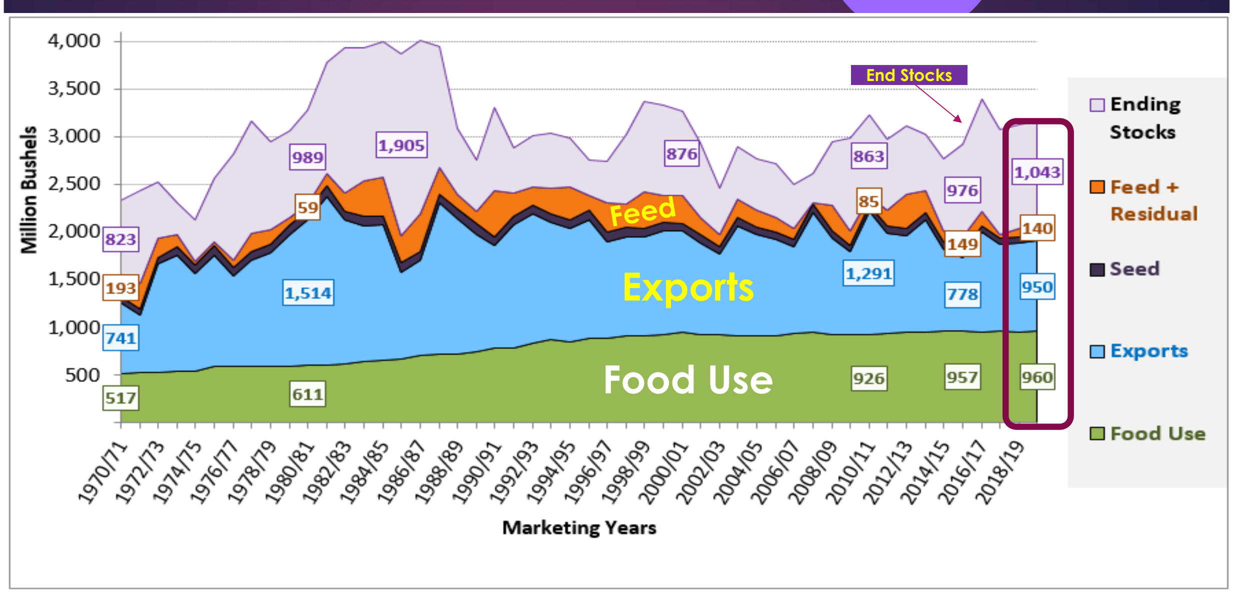
U.S. Wheat Use – By Category

50

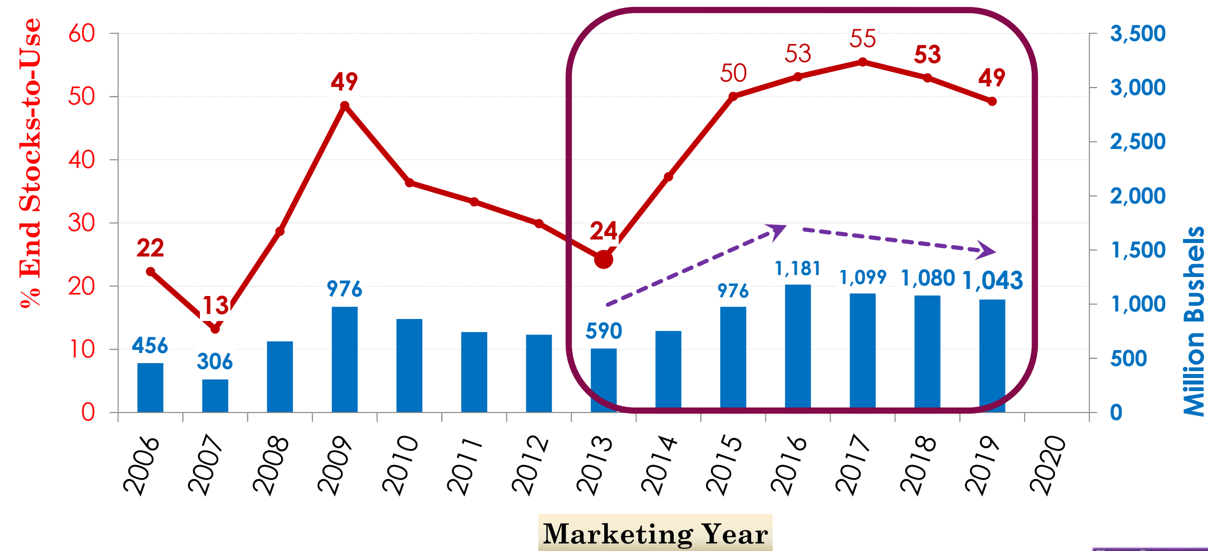


U.S. Wheat Use – By Category

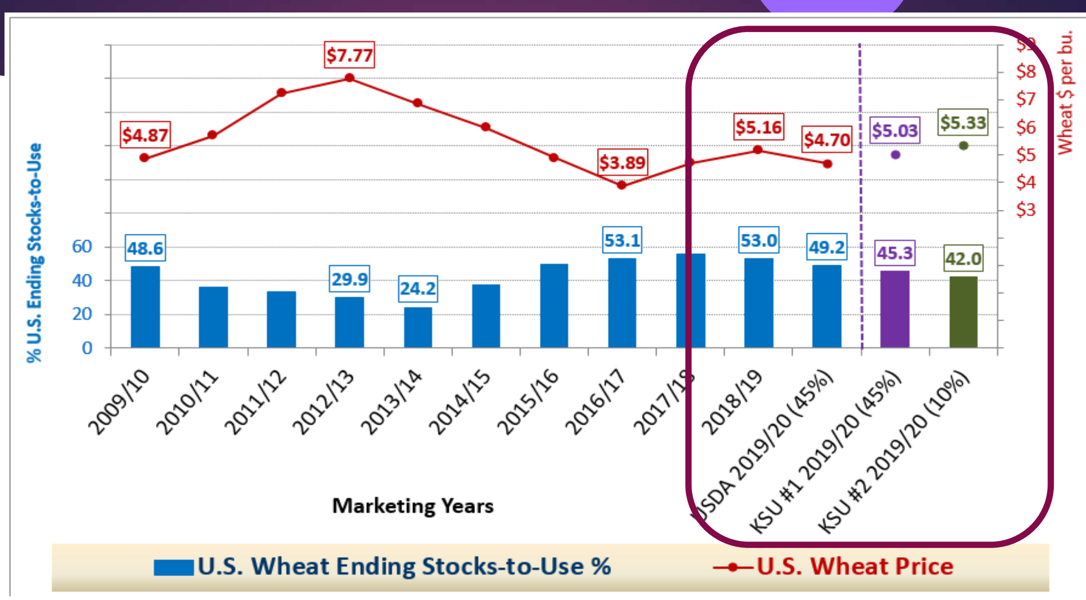
51



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



U.S. Wheat Ending Stocks/Use & Prices



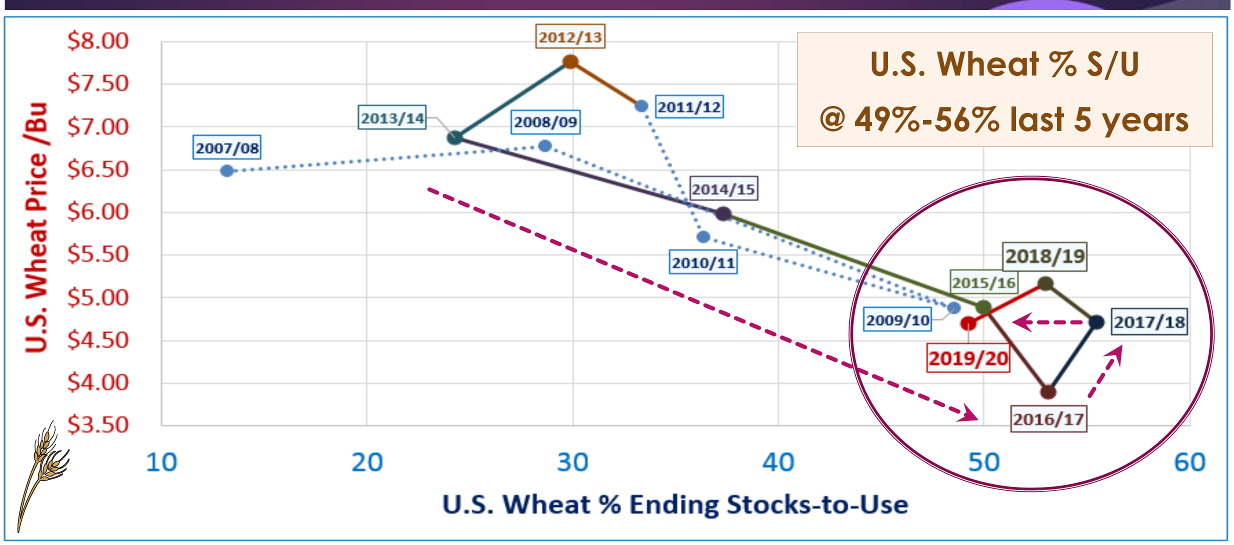
Wheat Market Forecast for "New Crop" MY 2019/20

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

Item	USDA 2019/20	KSU Scenario #1 2019/20 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)		KSU Scenario #2 2019/20 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
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
Production (million bu.)	1,962	-84 mb	1,878	-84 mb	1,878
Imports (million bu.)	120		120		120
Total Supply (million bu.)	*3,162*	-84 mb	3,078	-84 mb	3,078
Food Use	960		960		960
Seed Use	68		68		68
Exports	950		950	+50 mb	1,000
Feed & Residual Use	140		140		140
Total Use	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%		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

MY 2007/08 – "New Crop" MY 2019/20

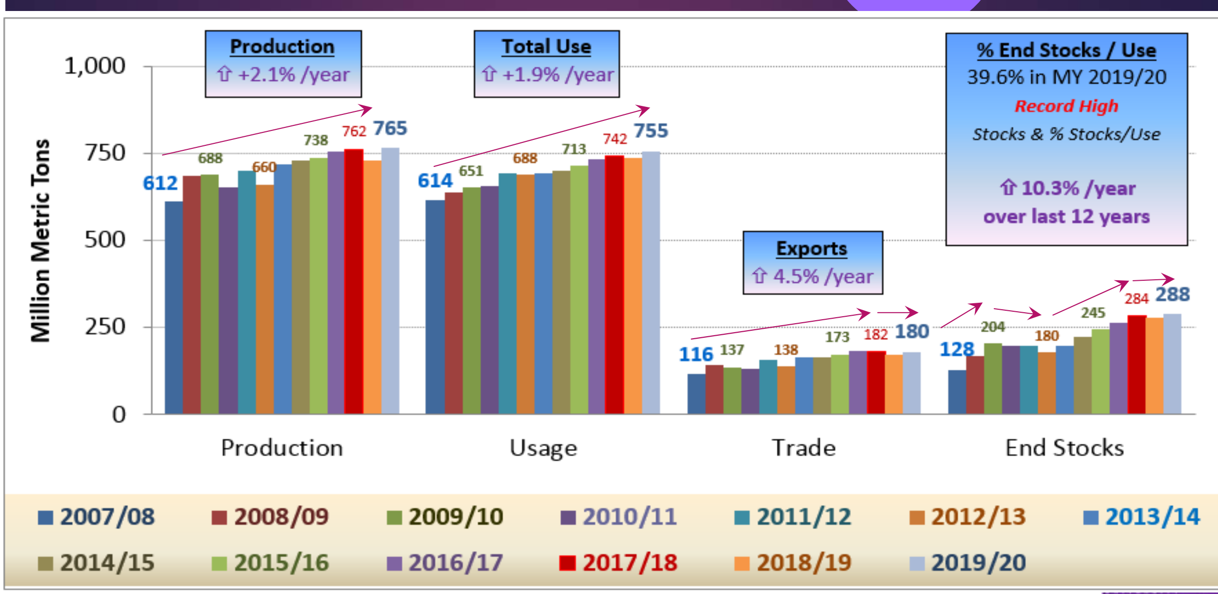


World Wheat Market Prospects:

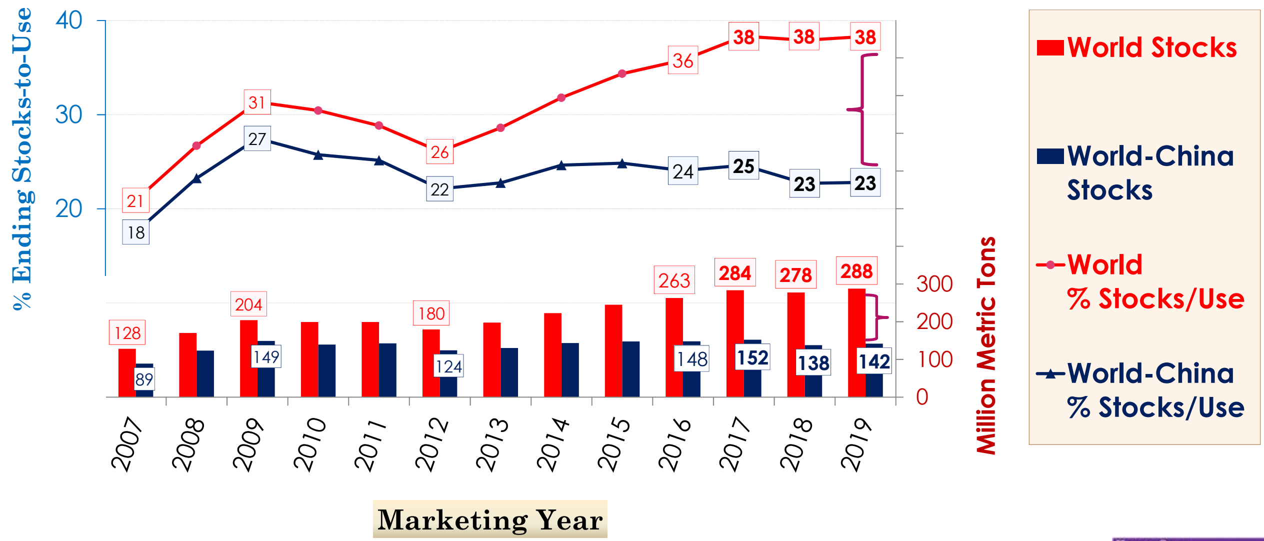
Large Supplies ⇨ Less of a *"Buyer's Market"*

- ***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

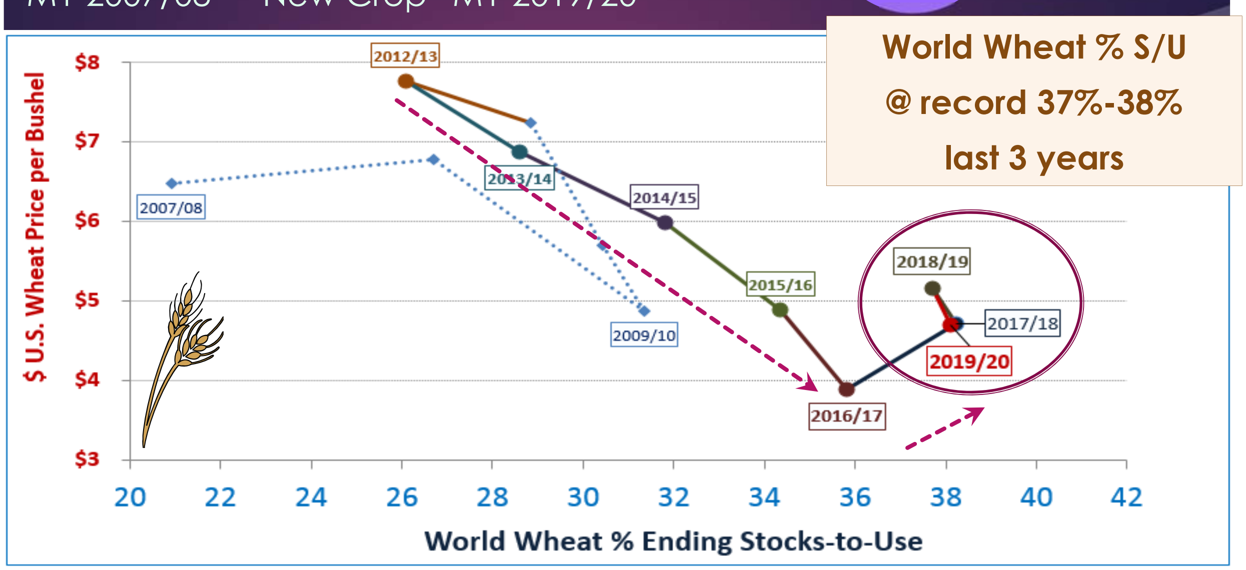


World & World-less-China Wheat Stocks & S/U



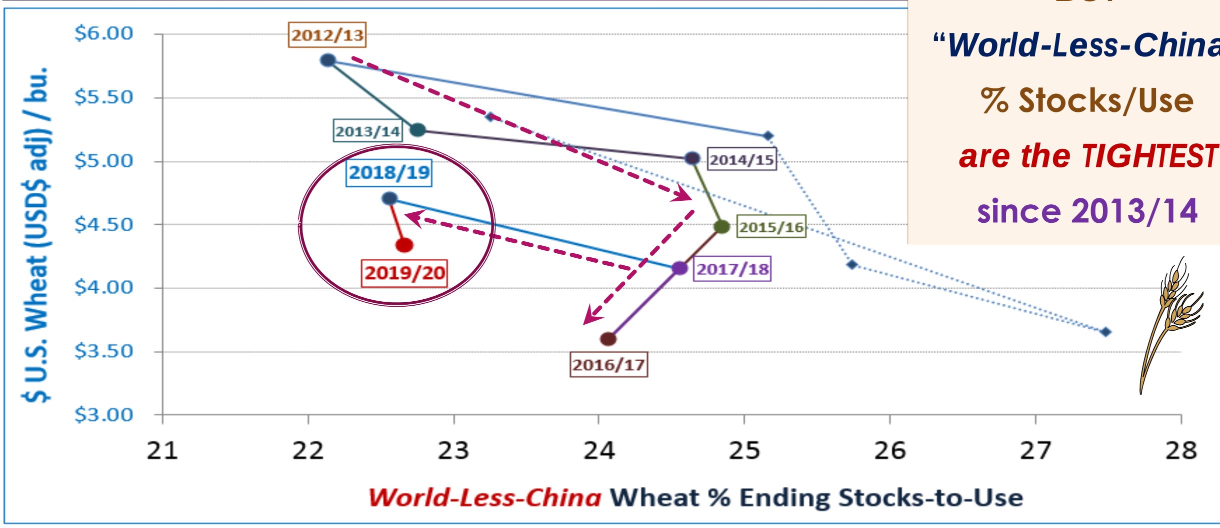
U.S. Wheat Price ($) vs World % Stx/Use

MY 2007/08 – "New Crop" MY 2019/20



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

MY 1973/74 – "New Crop" MY 2019/20



BUT

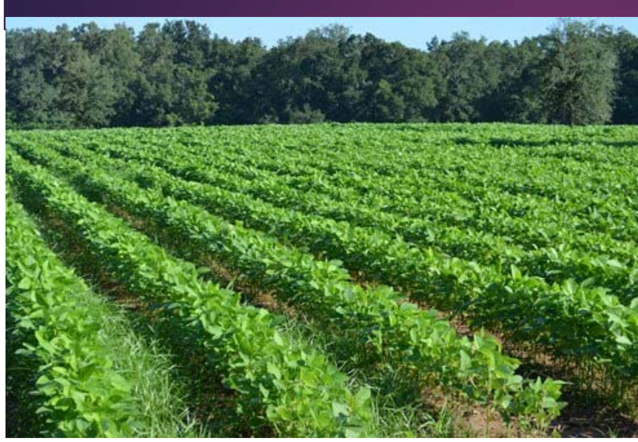
"World-Less-China"

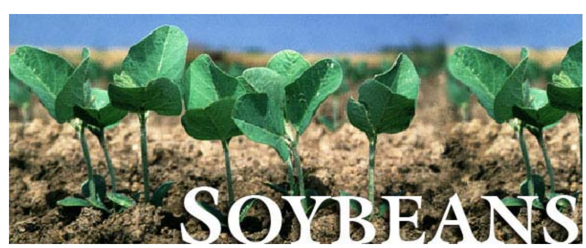
% Stocks/Use

are the TIGHTEST

since 2013/14

Soybean Markets





KANSAS STATE UNIVERSITY | Department of Agricultural Economics

U.S. Soybean Market Prospects in 2018-19

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…..

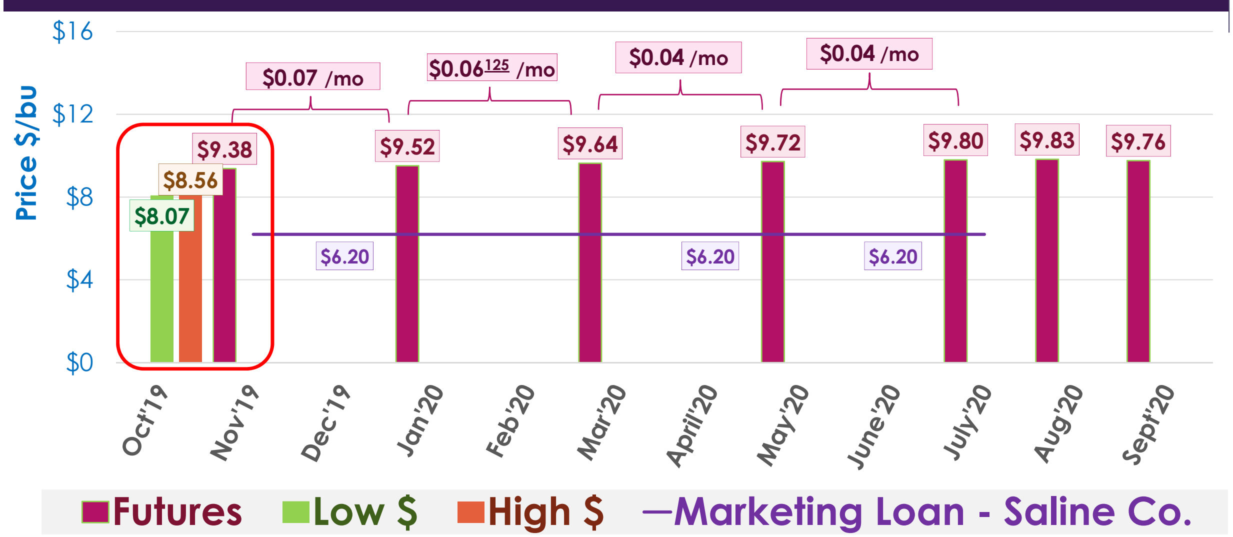
- **Soybean: Still "*Moderately Large*" Stocks & % S/U**
  - **End Stocks** $^{2019/20}$ ⇨ 460 mln bu *(Down vs 913 mb last year)*
  - **% Stocks/Use** $^{2019/20}$ ⇨ 11.4% S/U *(Down vs 23.0% last year)*
- **Cotton: *Large* % Stocks/Use *&* Lower $'s in MY 2019/20**
  - **Production** $^{2019/20}$ ⇨ 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

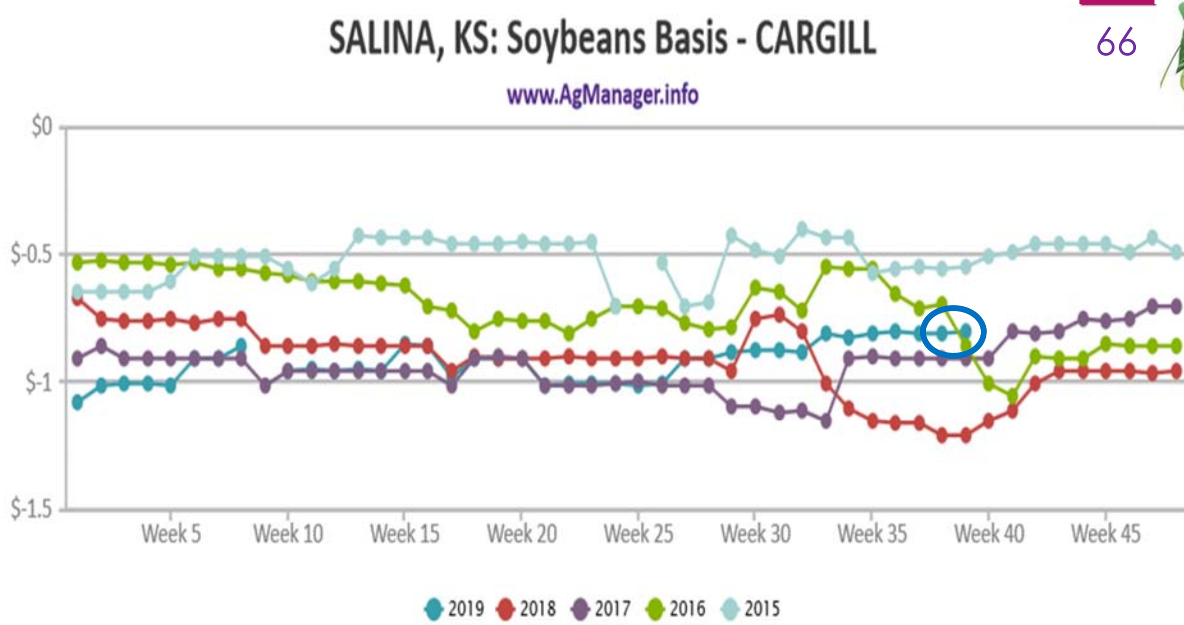
Weekly Chart: September 2014 through October 22, 2019 a.m.

Soybean Cash & Futures Price $'s

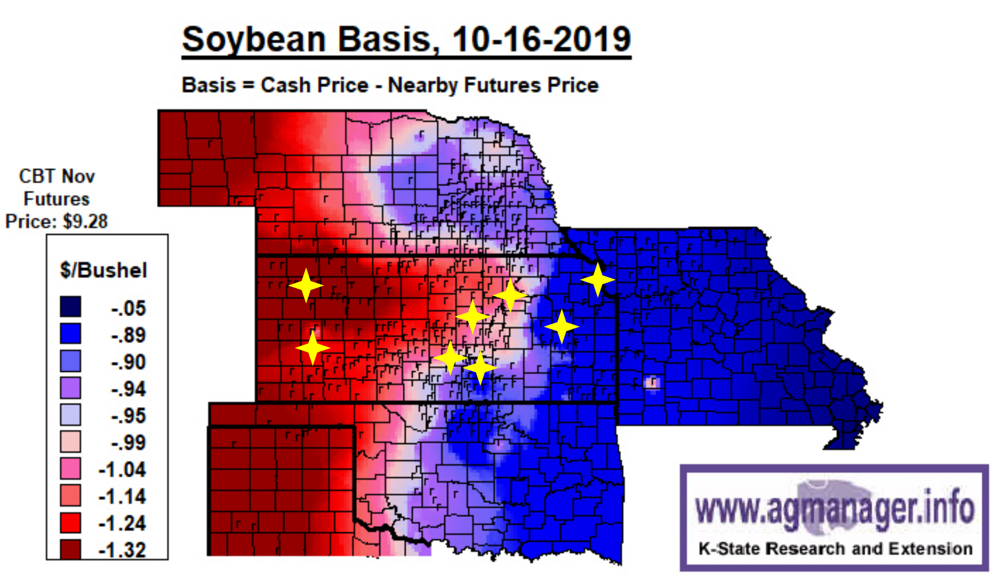
Salina, KS Local Elevators - October 22, 2019 a.m.



66

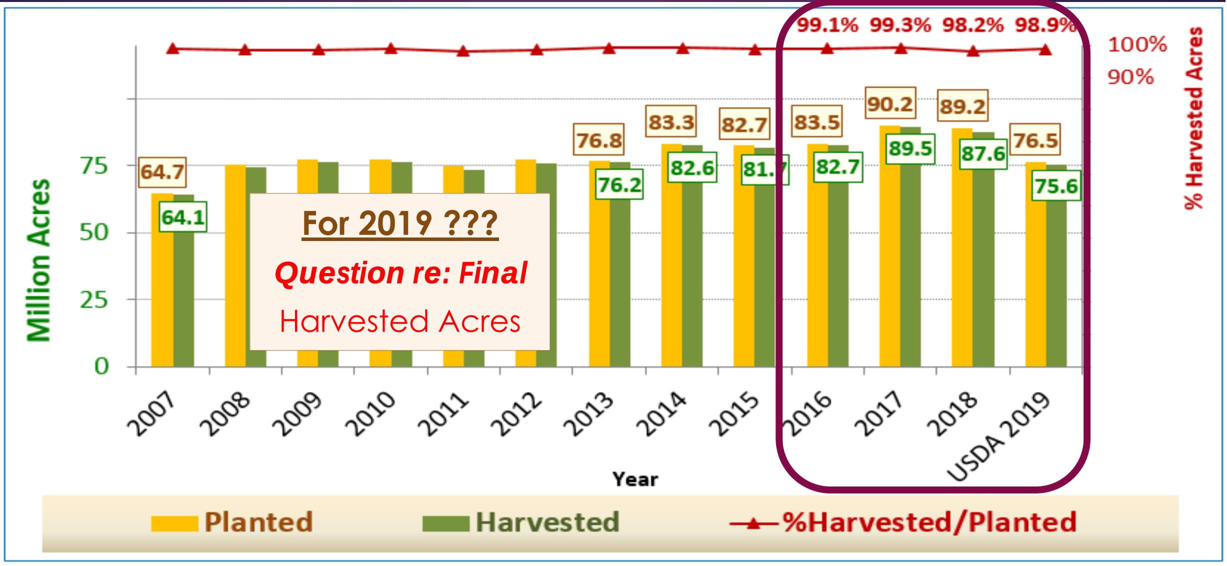

SALINA, KS: Soybeans Basis - CARGILL
www.AgManager.info
$0
$-0.5
$-1
$-1.5
Week 5
Week 10
Week 15
Week 20
Week 25
Week 30
Week 35
Week 40
Week 45
2019
2018
2017
2016
2015

67


Soybean Basis, 10-16-2019
Basis = Cash Price - Nearby Futures Price
CBT Nov
Futures
Price: $9.28
$/Bushel
-.05
-.89
-.90
-.94
-.95
-.99
-1.04
-1.14
-1.24
-1.32
www.agmanager.info
K-State Research and Extension

U.S. Soybean Acreage

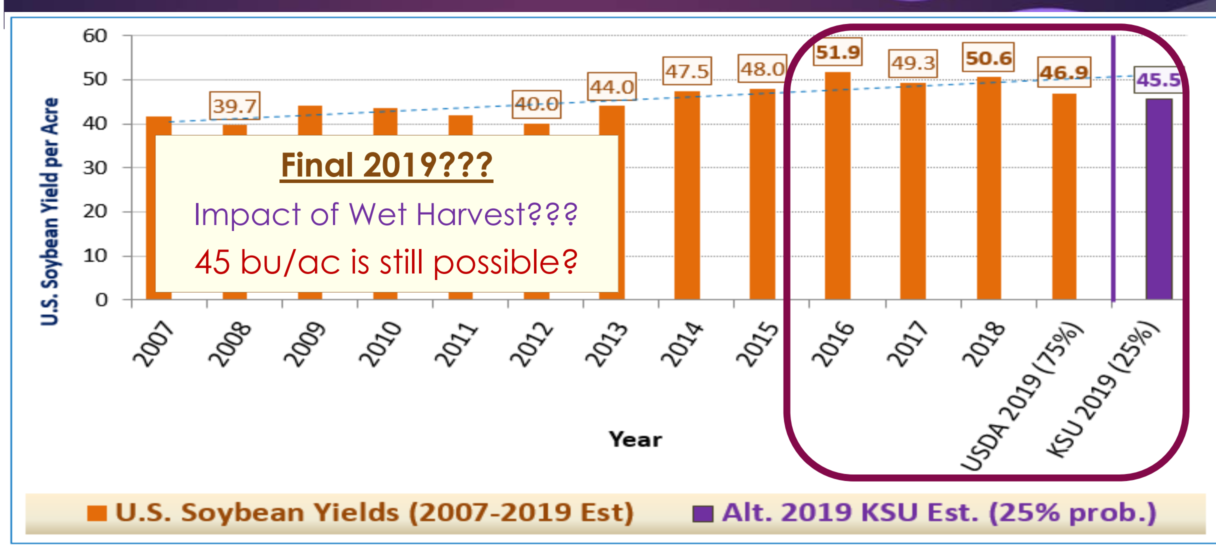
68



U.S. Soybean Yields

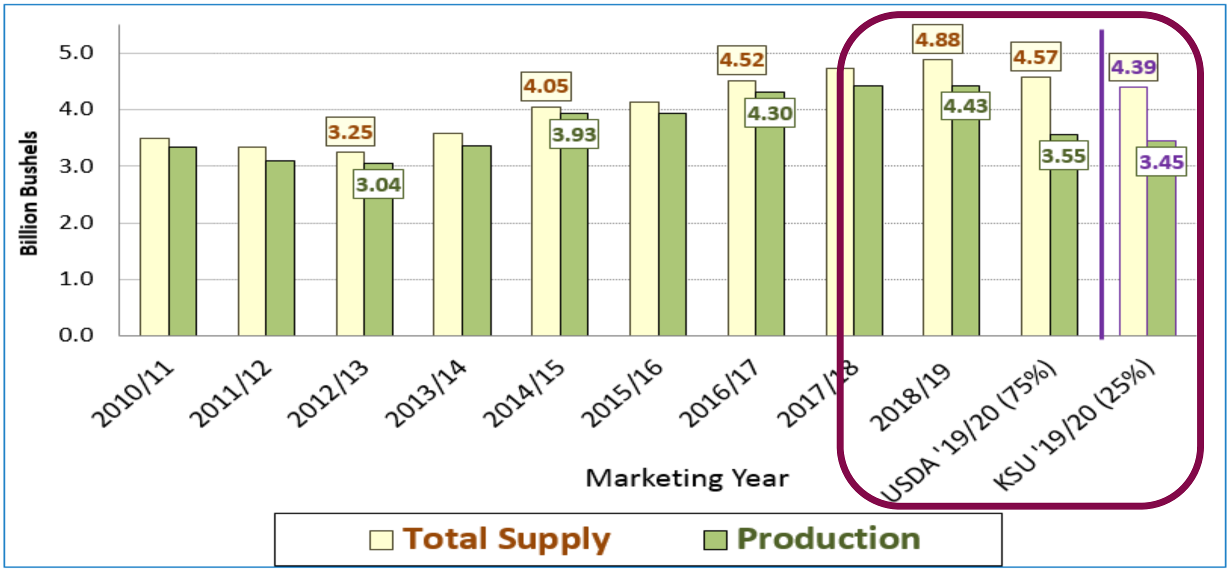
USDA 2019 = 46.9 bu/ac

69



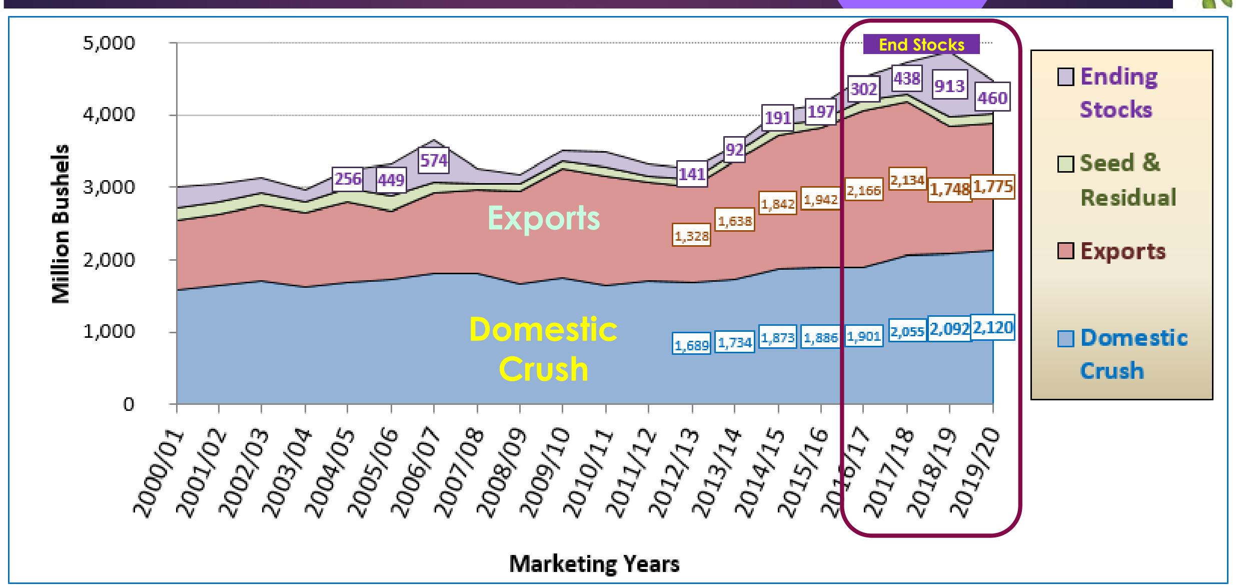
U.S. Soybean Production & Supplies

70



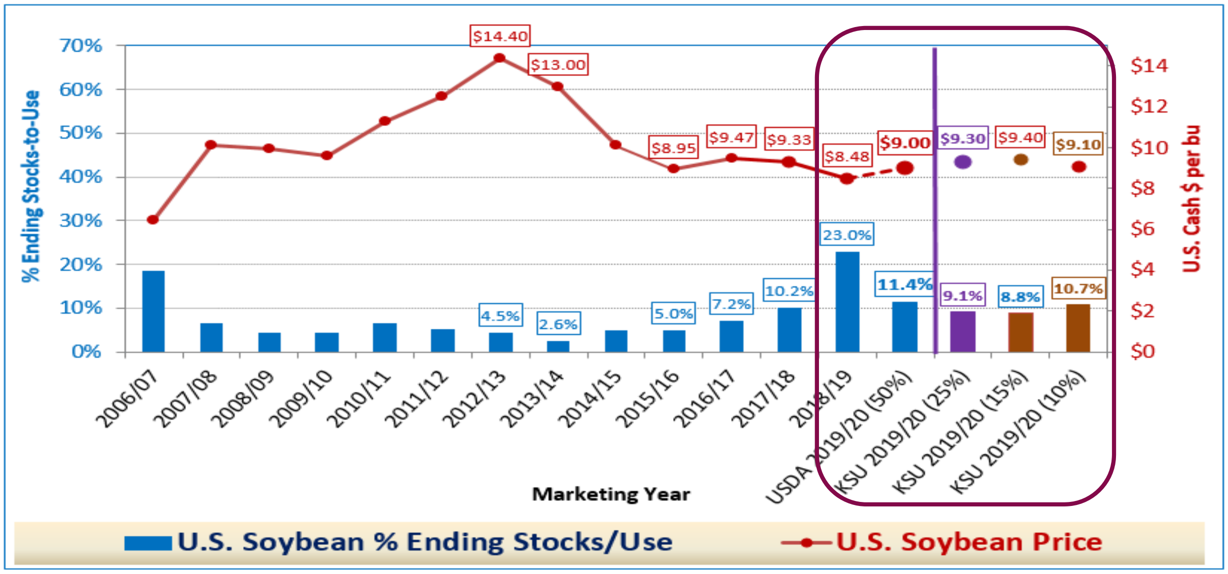
U.S. Soybean Use & End Stocks

71



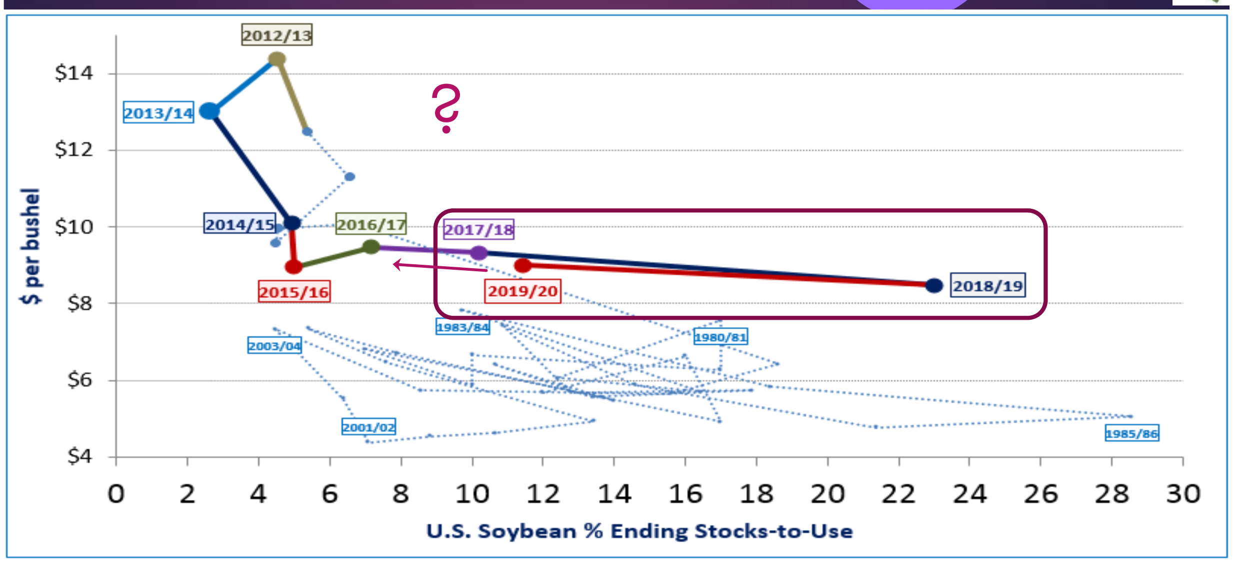
U.S. Soybean % Stocks/Use vs Price$

72

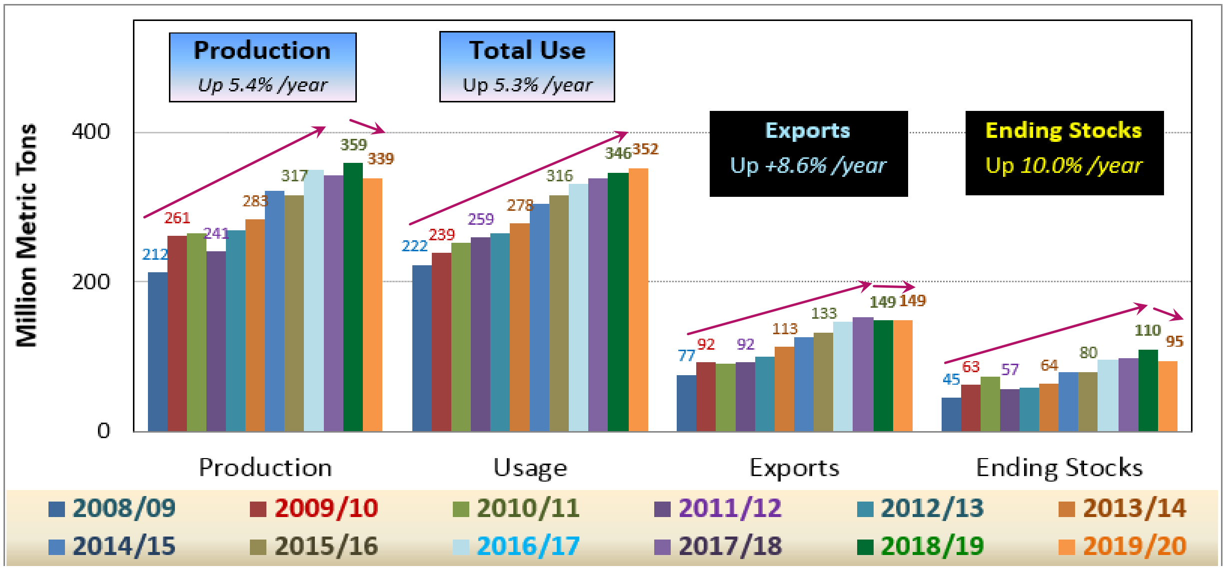


U.S. Soybean % Stocks/Use vs Price$

73

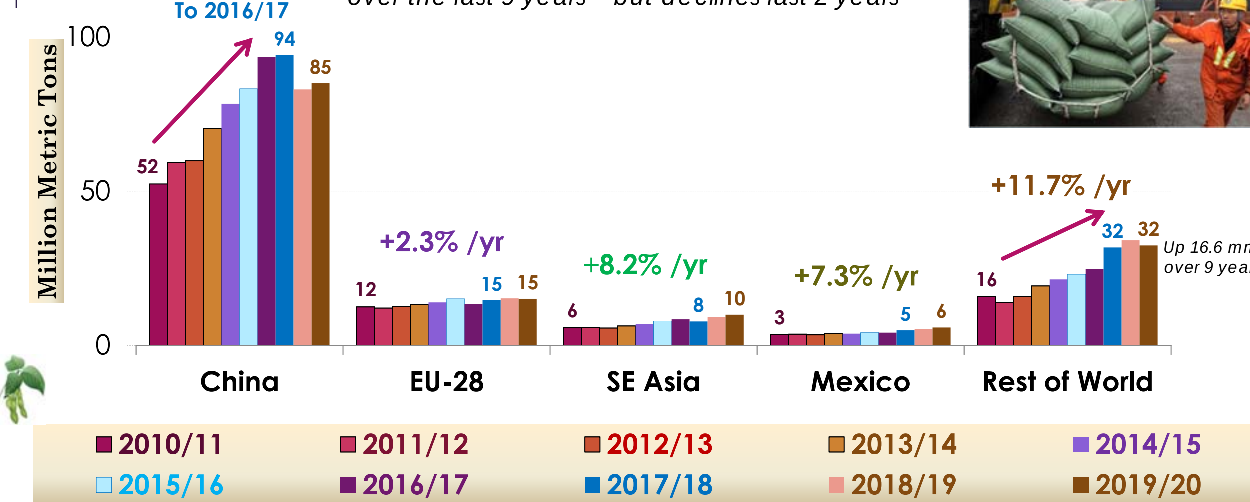


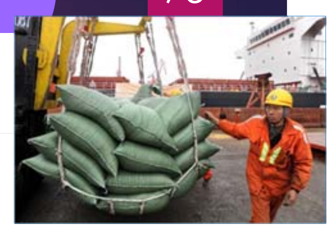
World Soybean Supply, Use & Stocks



Soybean Importer Purchases

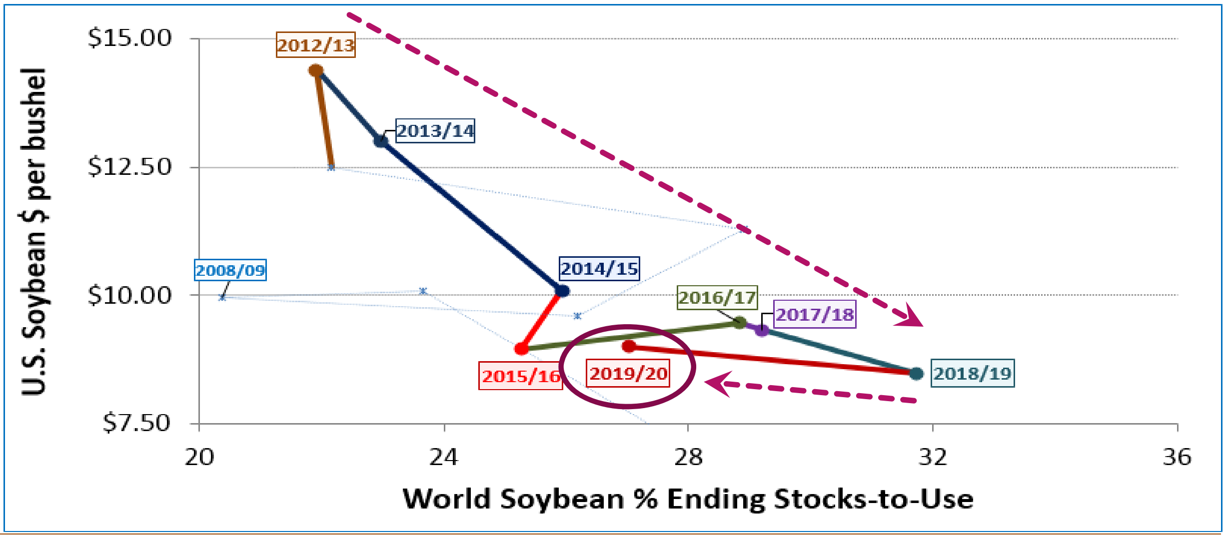
China ⇧ of 32.7 mmt in soybean imports over the last 9 years – but declines last 2 years





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

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

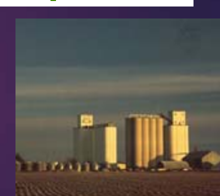


Questions?









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