



United States Department of Agriculture

USDA's  
93rd  
Annual

# Agricultural Outlook Forum

## A New Horizon: The Future of Agriculture

February 23-24, 2017 • Crystal Gateway Marriott Hotel, Arlington, Virginia



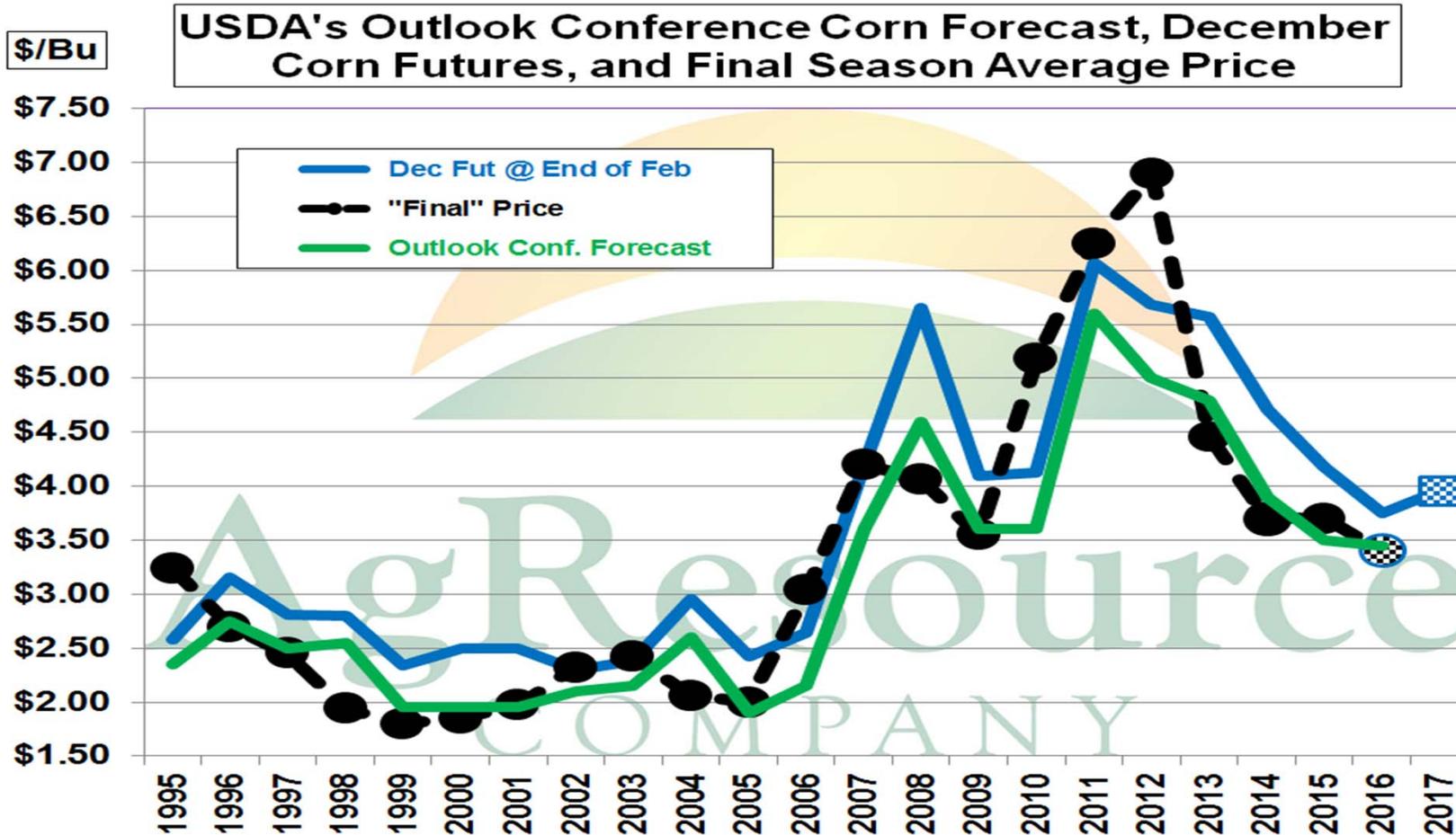
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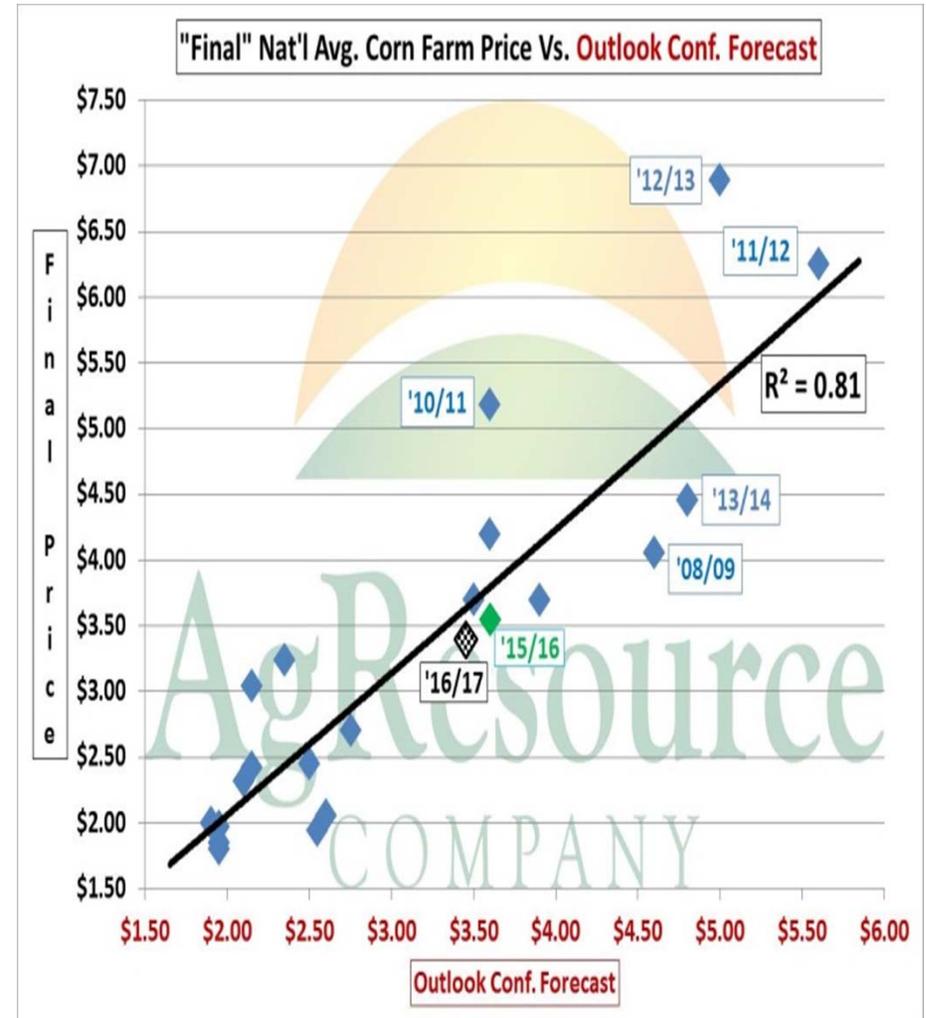
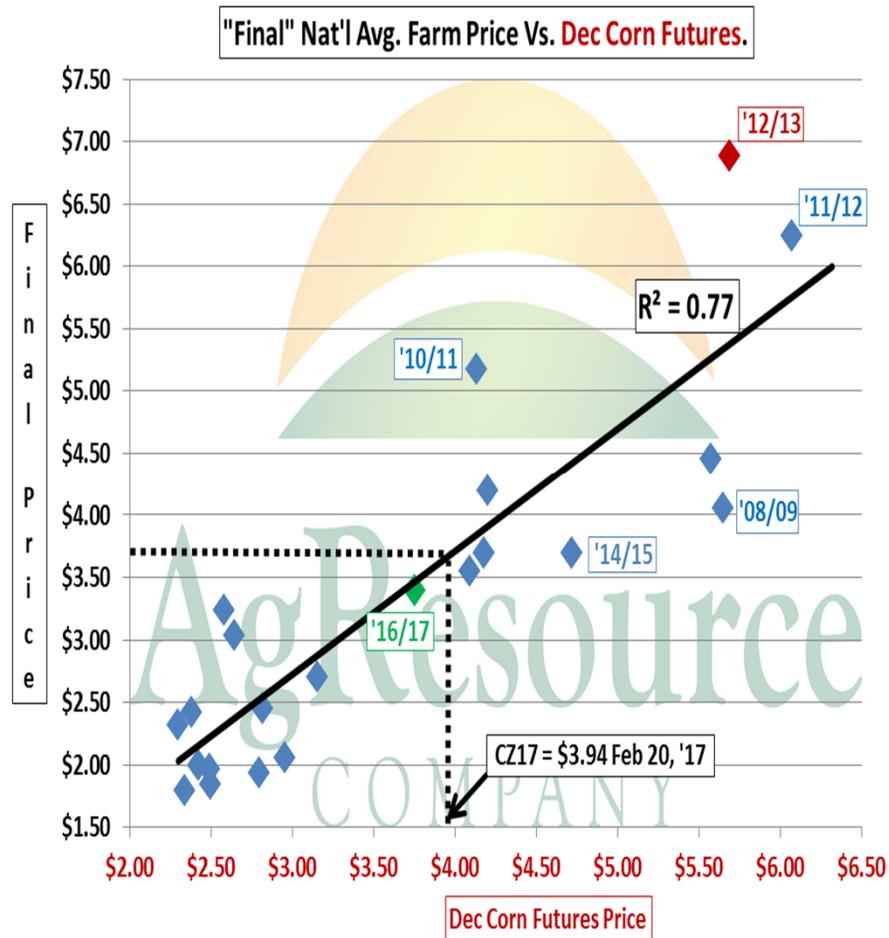
**US Grain & Oilseed Abundance; How Will It End?**

AgResource Company, Chicago, IL 60606

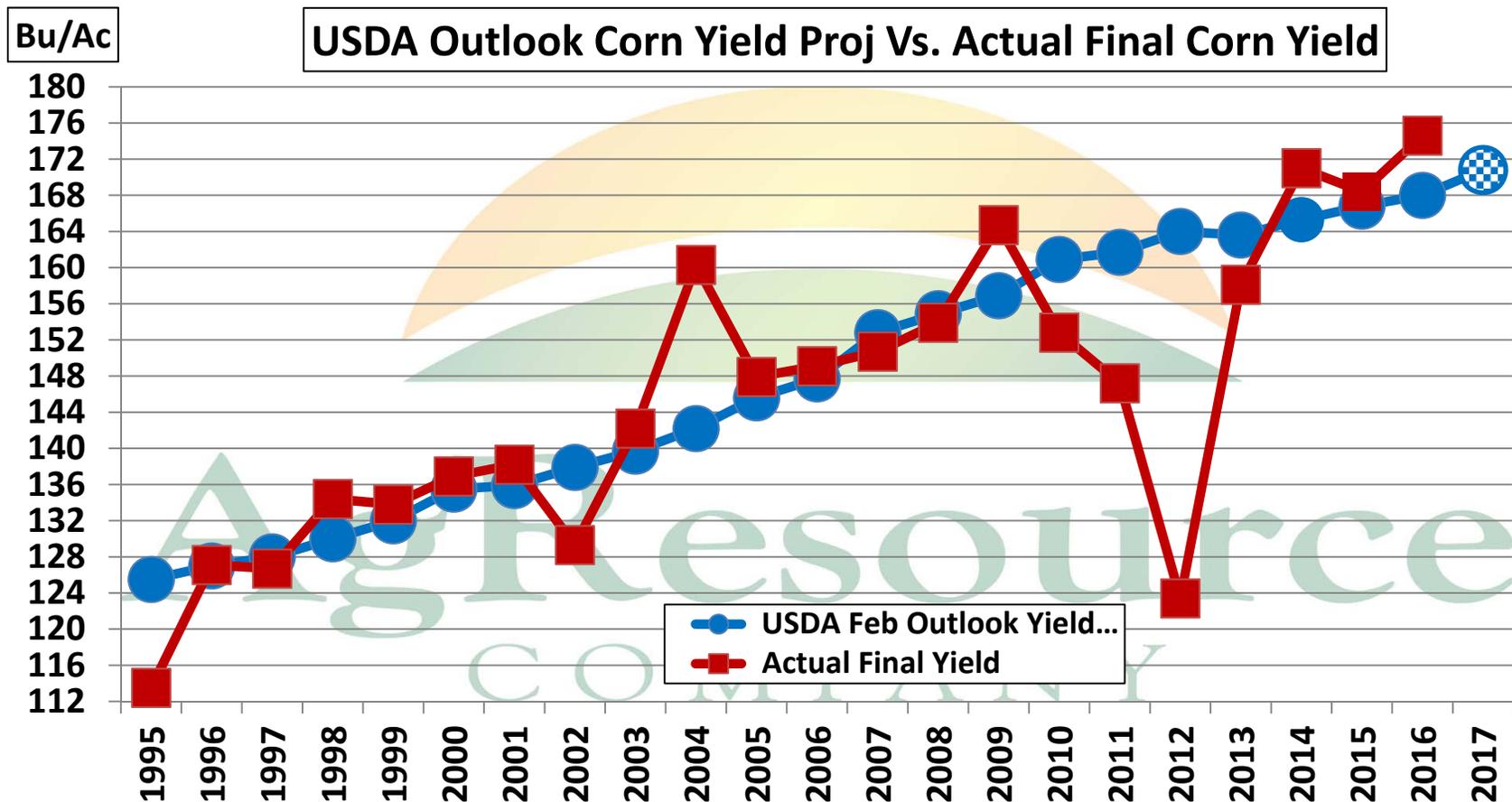
# WASDE's Initial Forecast of Average US Corn Farmgate Prices!



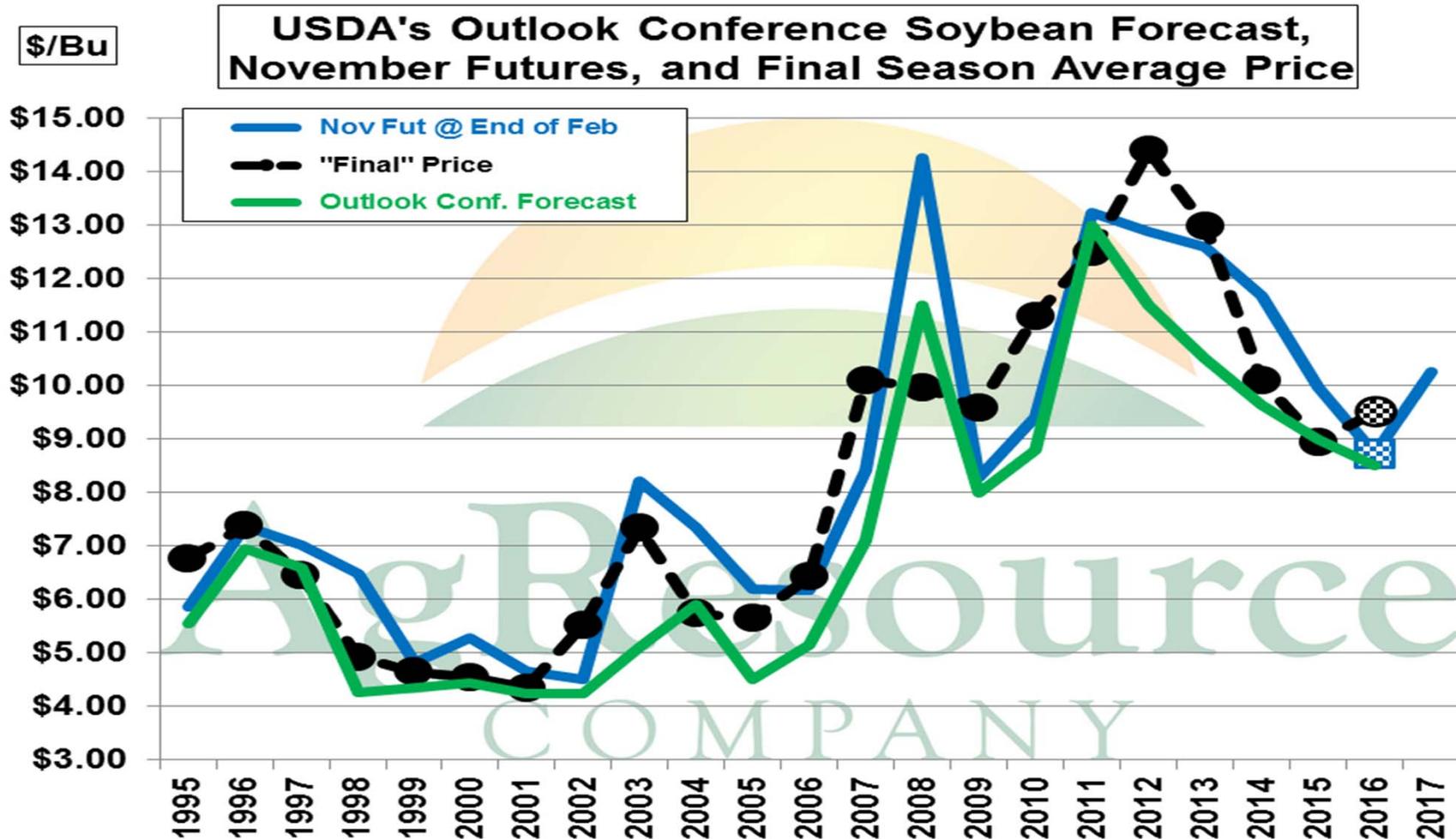
# WASDE Beats Futures (less average Cash Basis) at end of February!



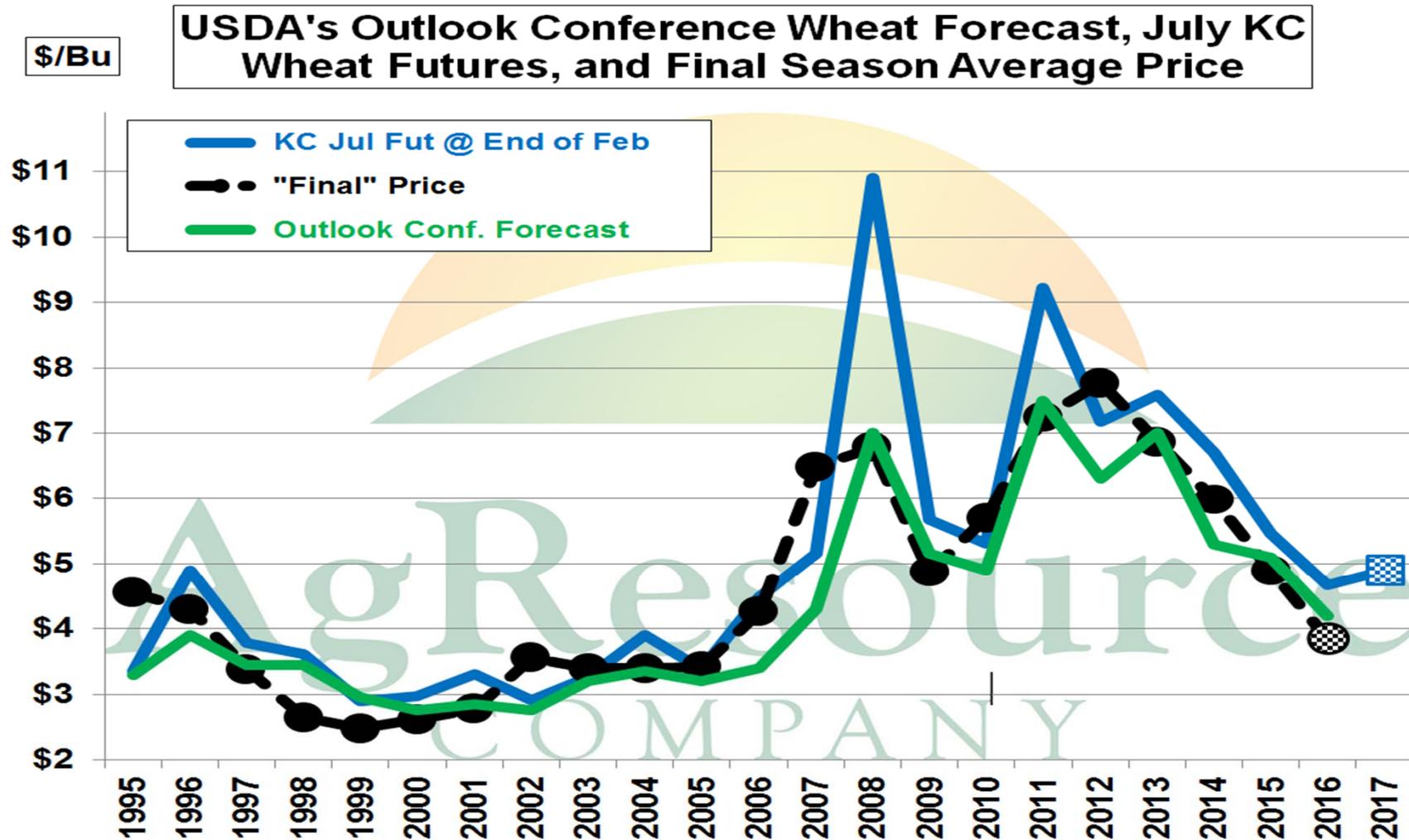
# USDA Annual Price Misses Largely Tied to Yield; US Corn Yield vs Outlook Est.



# Greater Volatility in Soybeans Due to South American Influence



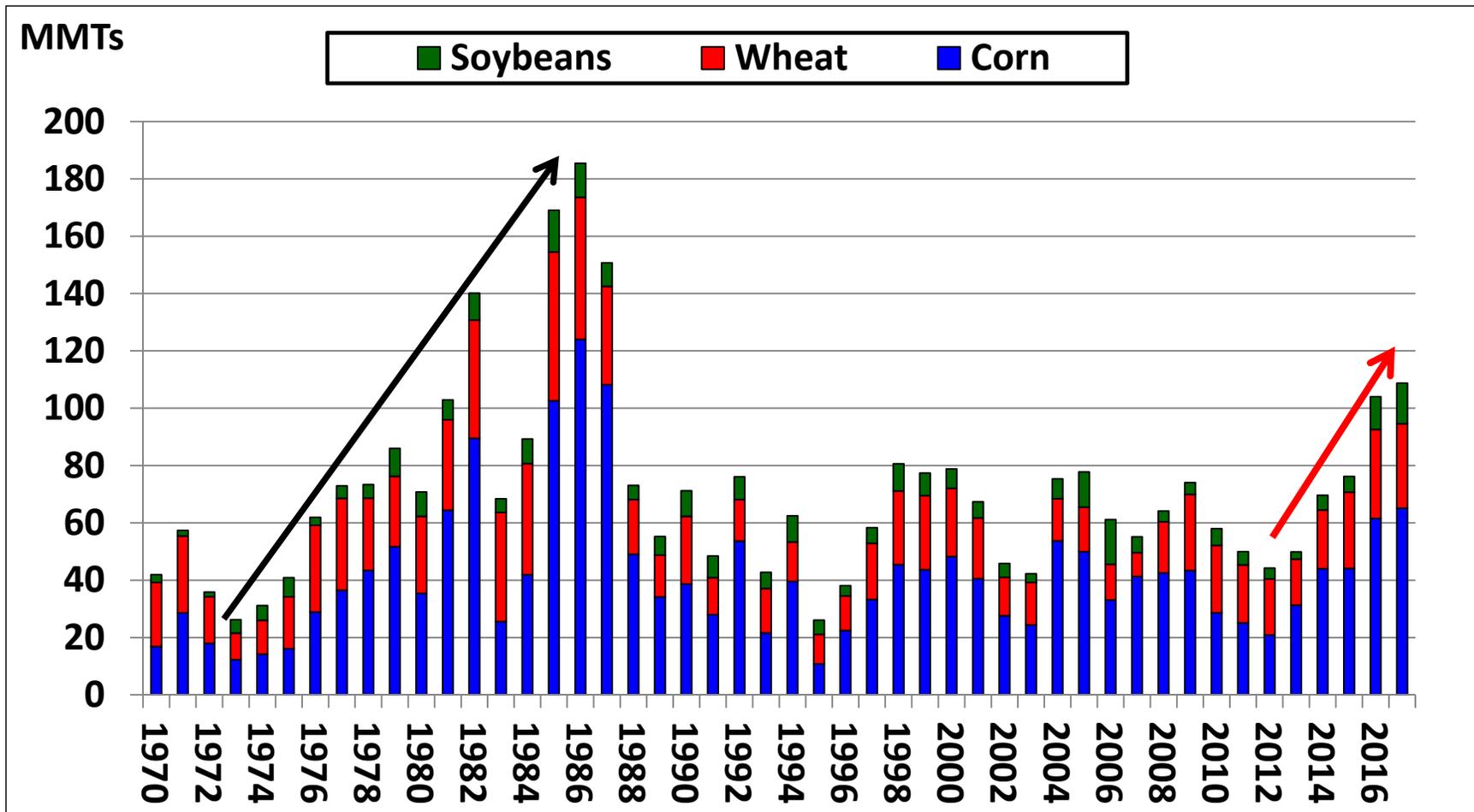
# WASDE Best Track Record has been in KC Wheat!



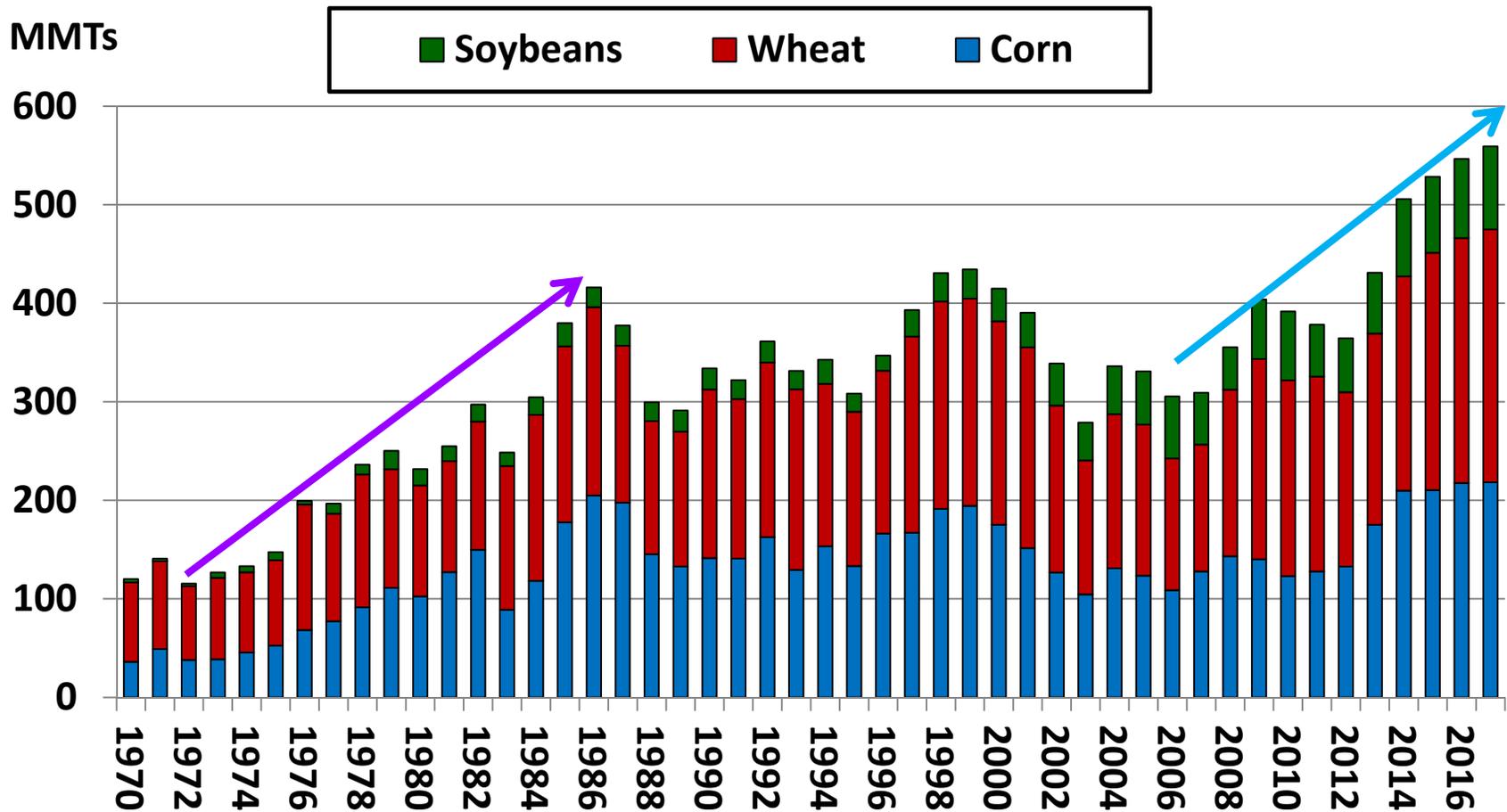
## Setting the Stage – Where Are We Today?

- **World major grain production (wheat/corn/soybeans) is record large. 2016/17 global major grain supplies are up 116 MMTs with end stocks rising 18 MMTs to a record large 546 MMTs. This is the 3<sup>rd</sup> year in a row of record large major grain supplies/stocks. Not even the crop woes of the EU over the past 2 years or last spring's damage to South American harvests have eased the supply pressure. It's a world awash in grain!**
- **As Bio Fuel demand becomes mature, future grain demand growth will come from expanding world livestock herds or new policy direction. The problem is that the expansion of world livestock herds reduces producer profitability as US and world meat production reach record levels.**
- **The world has increased harvested major crop acres by 179 Mil acres since 2006. This record large 10 year gain is largely due to elevated farm profitability amid expanding bio fuel demand. The world only needs 1.8% more grain/year to meet expanding caloric intake. A trend increase in world crop trend yields can meet this demand without additional cultivated acres. We are back to the 1980-2005 ag price landscape!**
- **China is also awash in grain! It has found a way (Farm Policy/tax) to slow imports of barely, sorghum, and corn derivatives such as DDG's (and ethanol). China imported a record 31 MMTs of total grains in 2014/15 or 1 out of every 5 MMTs of grain that traded in the world! China to export corn by 2018/19 as export fob spreads narrow.**
- **The world is producing record amounts of food, the key question going forward is whether future economic growth (outside of the US) can elevate demand to absorb the supply? Years of low prices has US ag producers are asking is: "How does this all end?"**

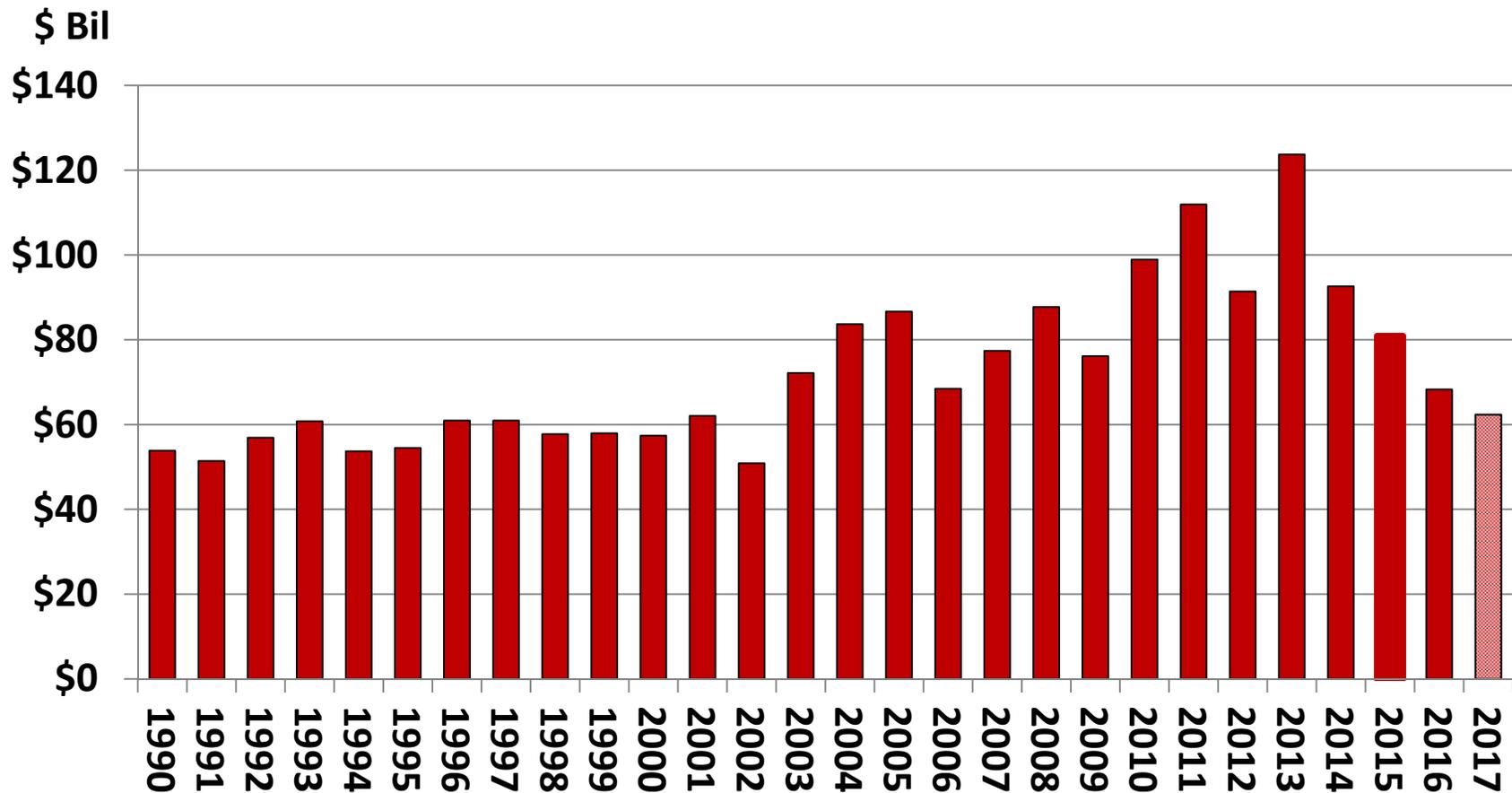
# US Combined Corn, Wheat and Soybean End stocks Since 1970



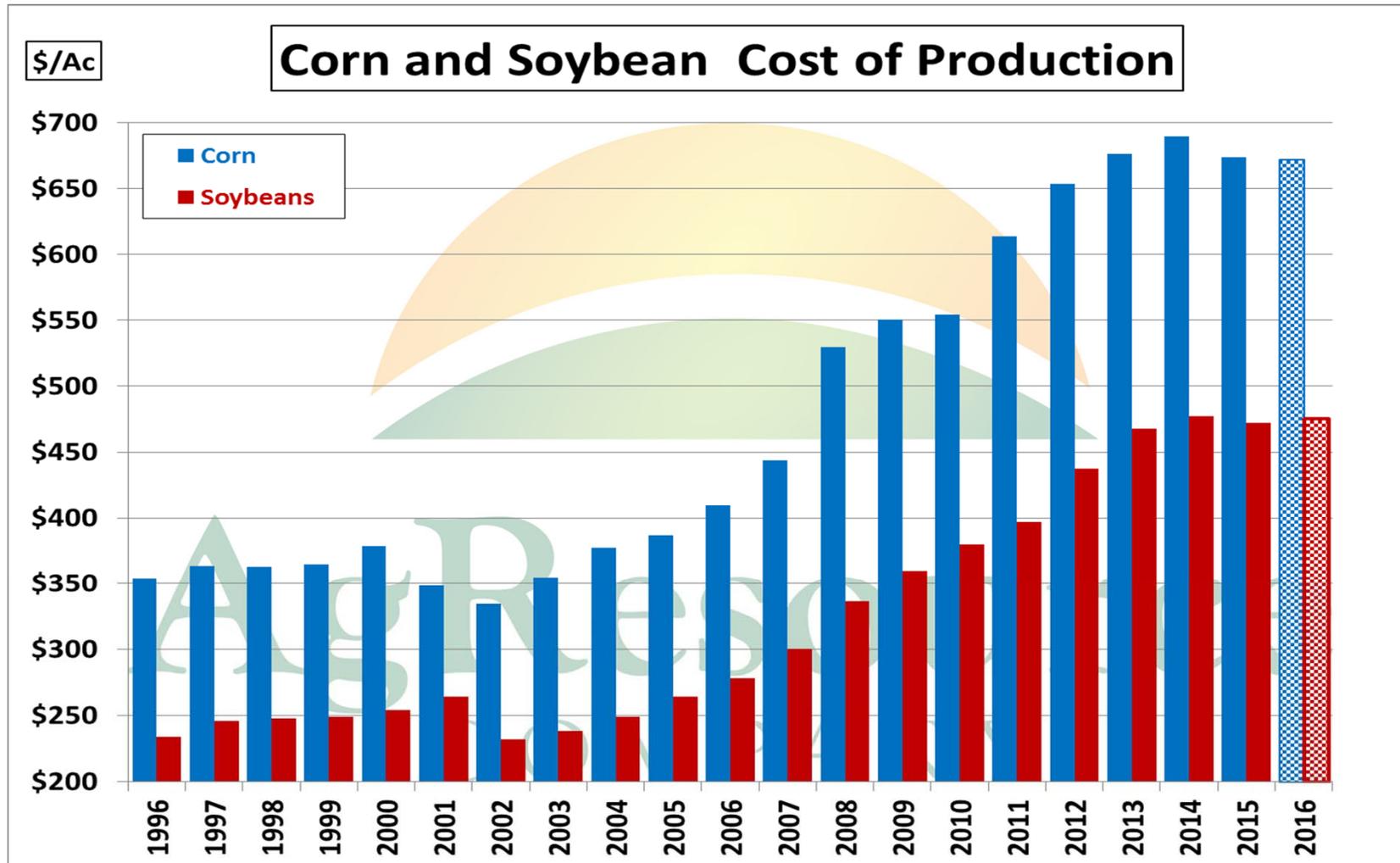
# 2016/17 World Grain Stocks – Record large 546 MMTs. 1972-1986 Stocks Growth lasted 12 Years!



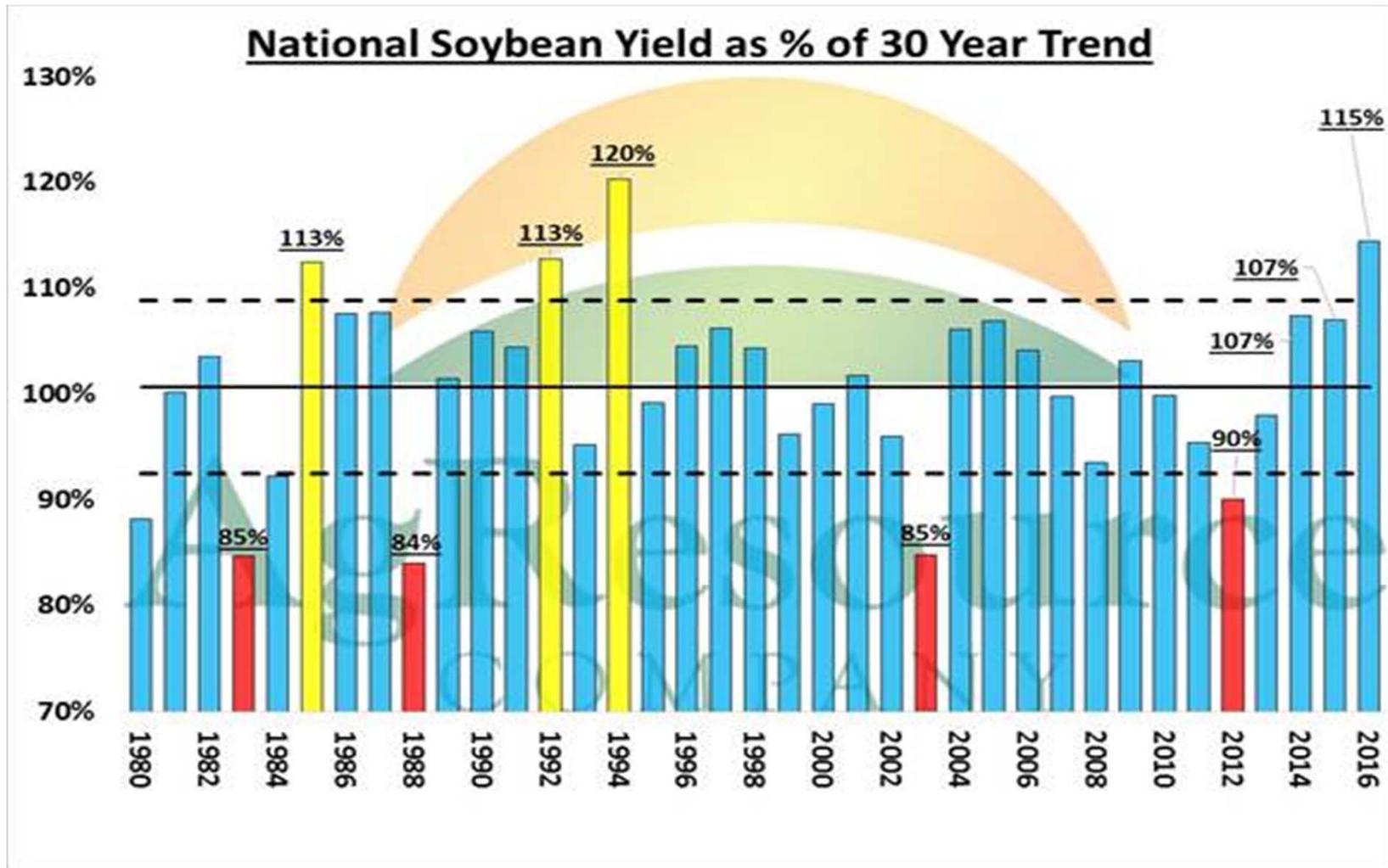
# US Net Farm Income- Unprecedented 4<sup>th</sup> year of Decline!



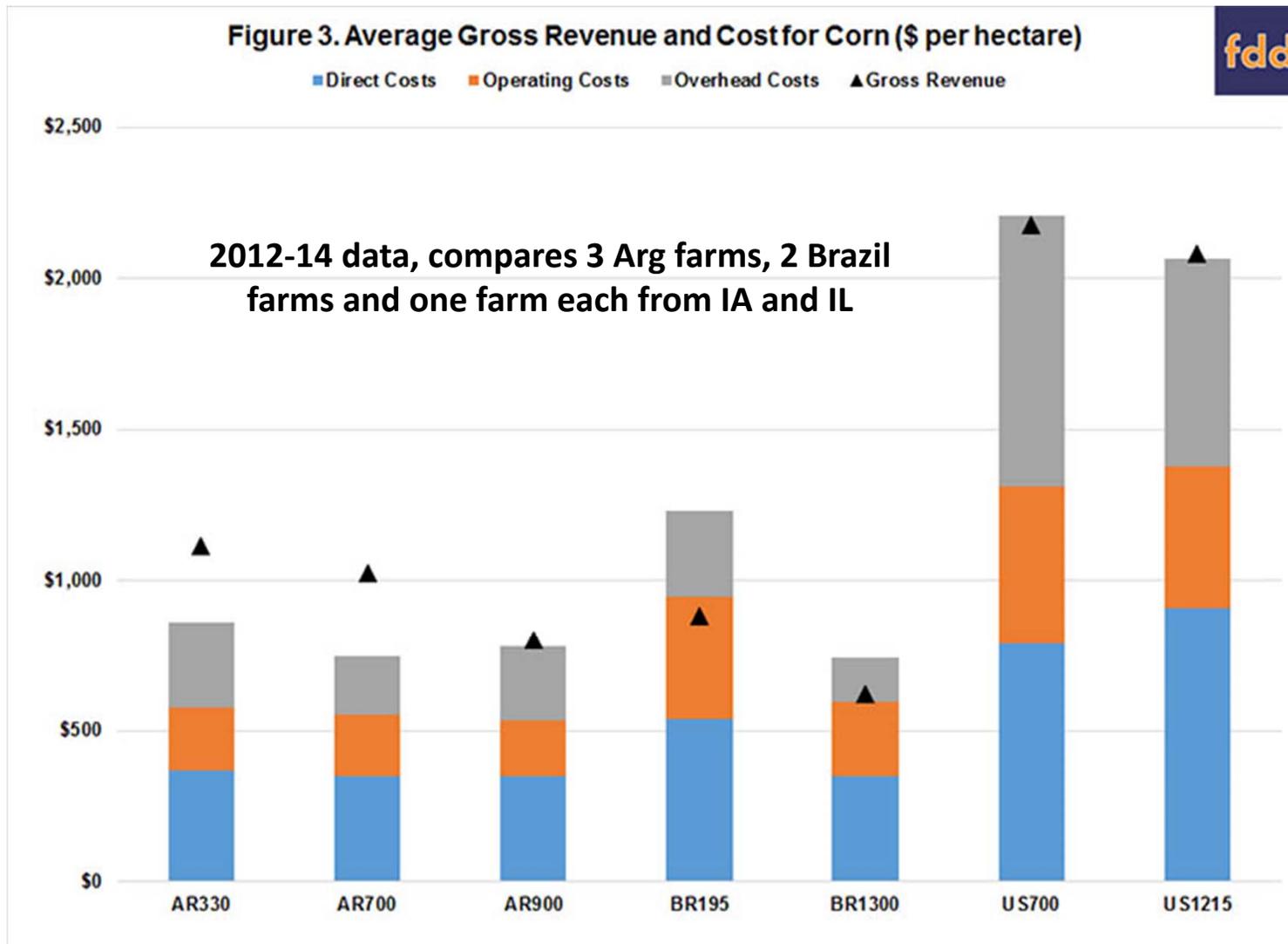
# A Period of Transition for US Ag: Cost of Production Falling Too Slowly!



# 4 Years of Record or Above Trend Soy Yields Would Suggest Genetic Change



# US Is Not The World's Low-Cost Corn Producer



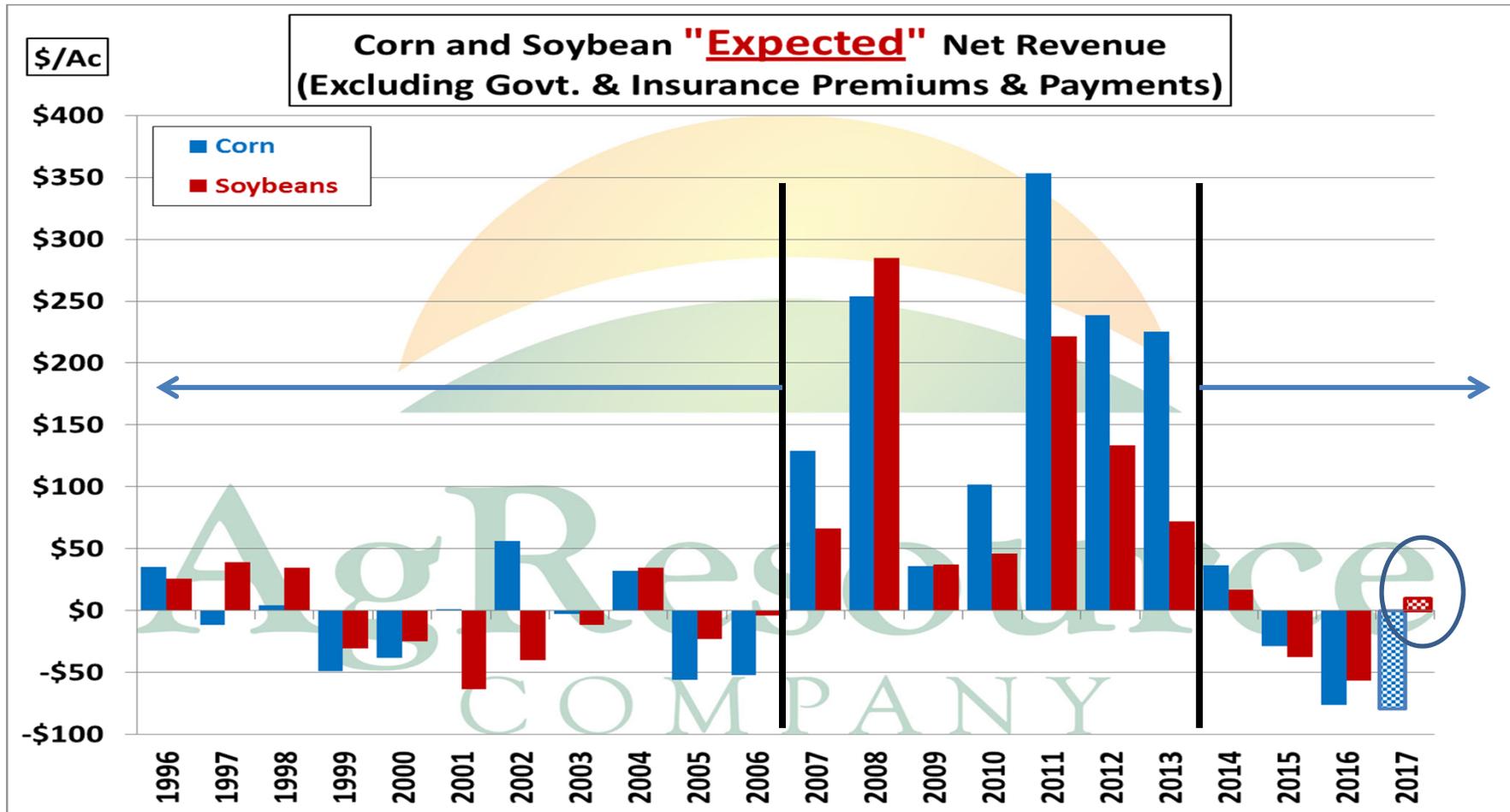
<http://farmdocdaily.illinois.edu/2015/11/international-benchmarks-for-corn-production.html>

# Where the Adjustment Comes From?

## Cost Component To Plant Corn

Cost Component	%
Pre-Harvest	5.6%
Seed	13.2%
Nitrogen	13.0%
Phosphate	3.6%
Potash	3.0%
Lime	1.2%
Herbicide	3.0%
Insecticide	2.3%
Crop Insurance	3.0%
Miscellaneous	1.1%
Interest	1.6%
Harvest Machinery	11.9%
Labor	4.2%
Land	33.3%
<b>Total Costs</b>	<b>100.0%</b>

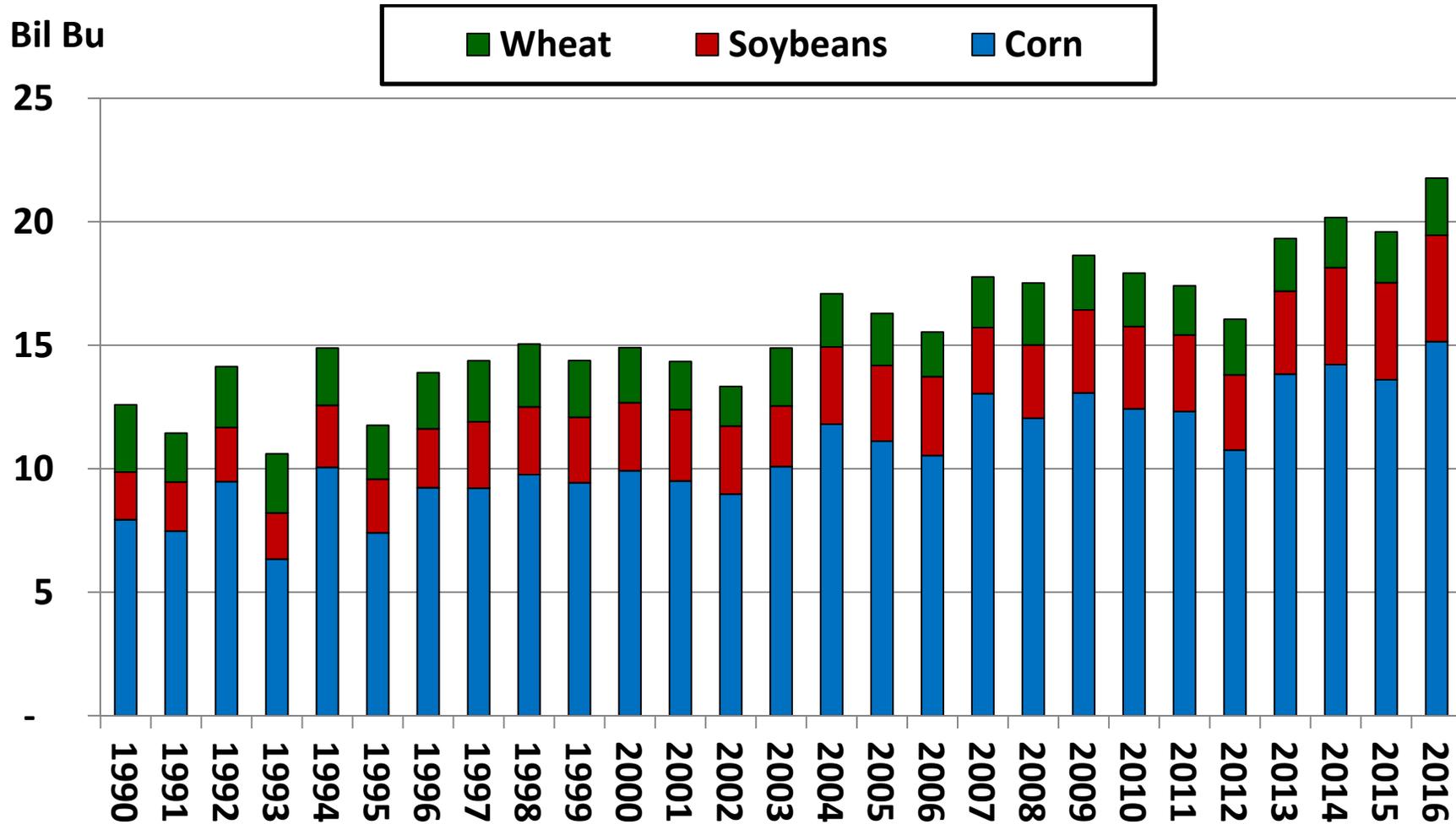
# Farmer Revenue Remains Under Pressure, Beans Showing 1<sup>st</sup> Profit since 2014



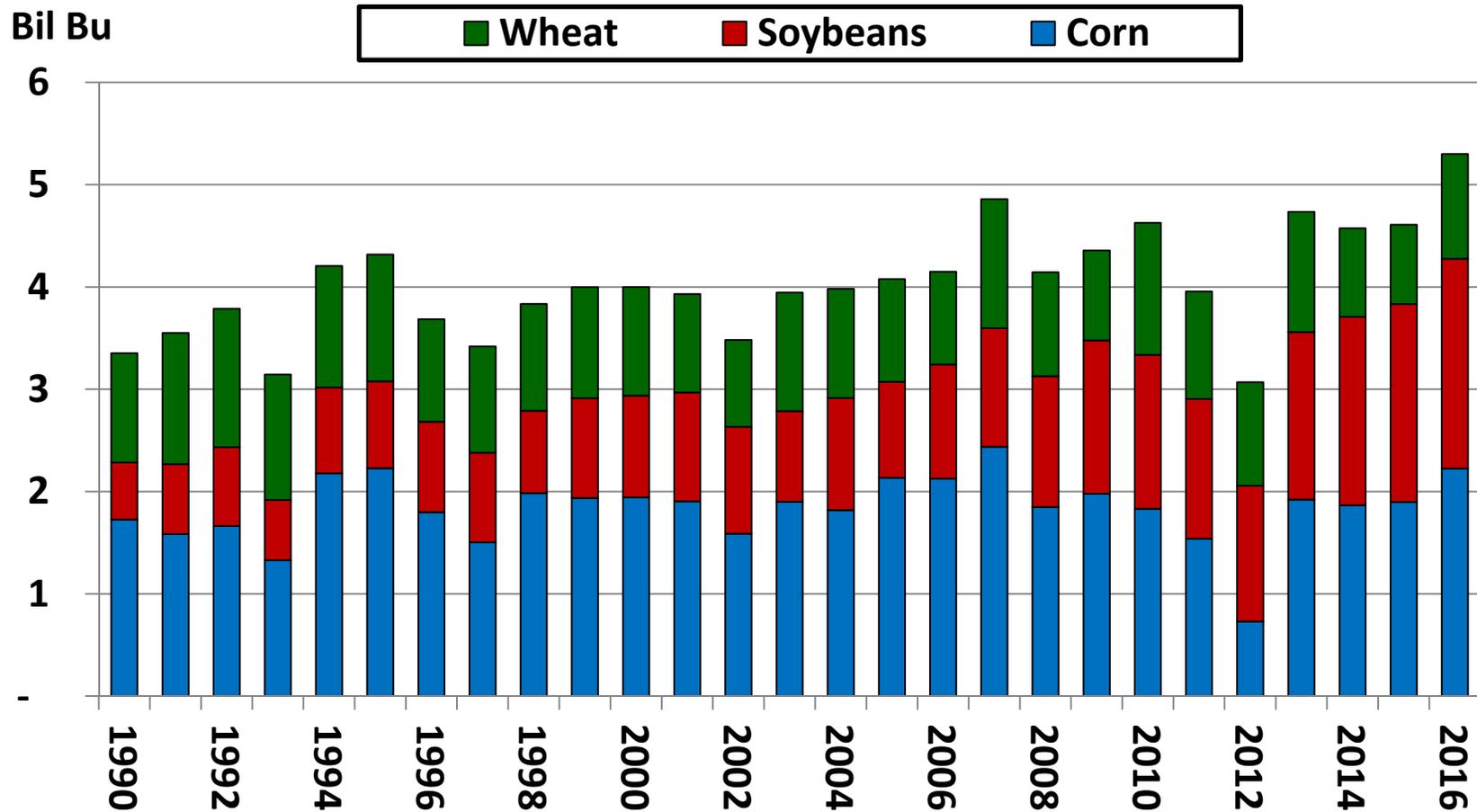
# 2016/17 Big US Crop/Big US Demand!



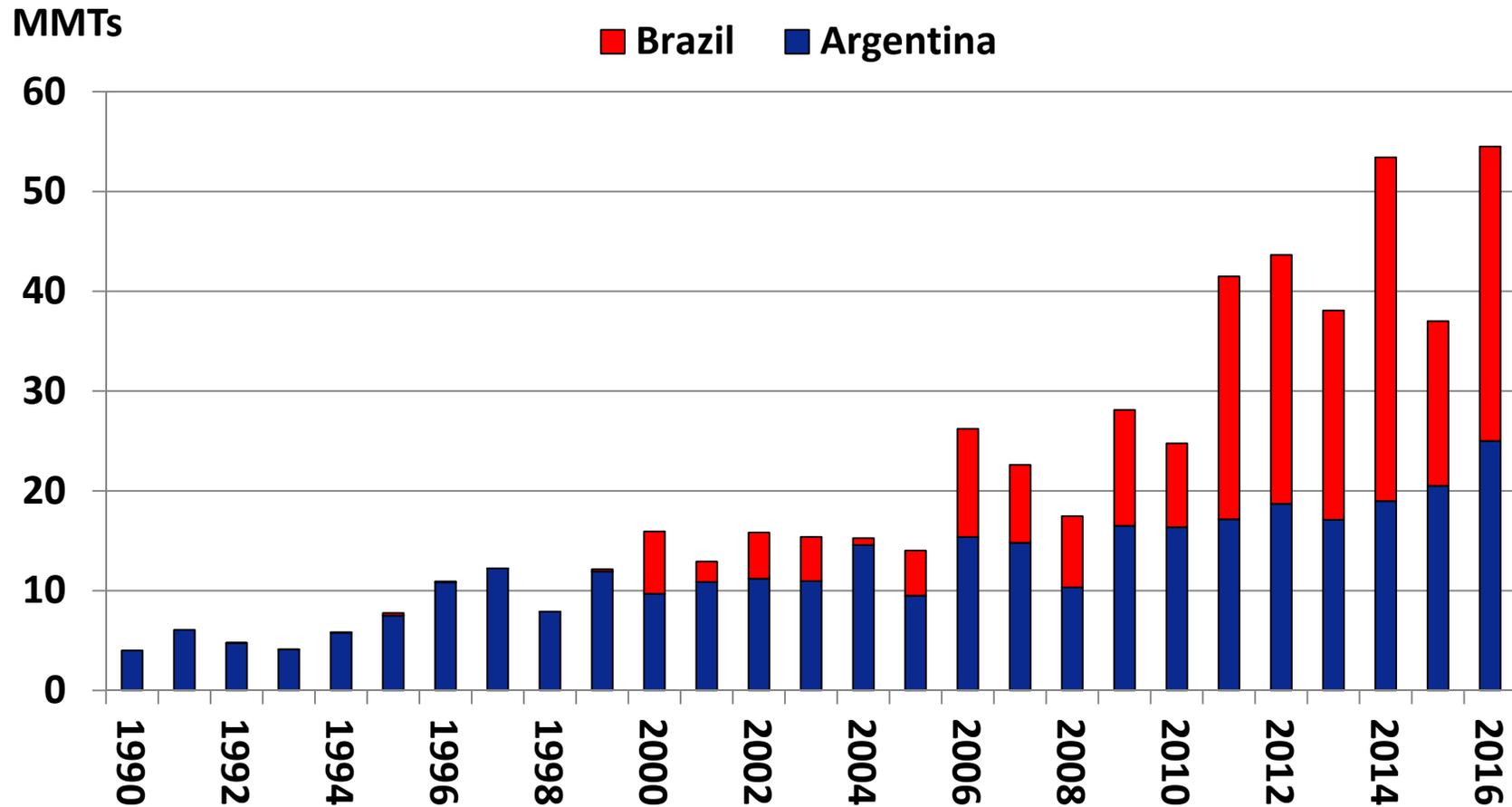
# Annual US Corn, Soybean and Wheat Harvests -2016 - a Record Harvest!



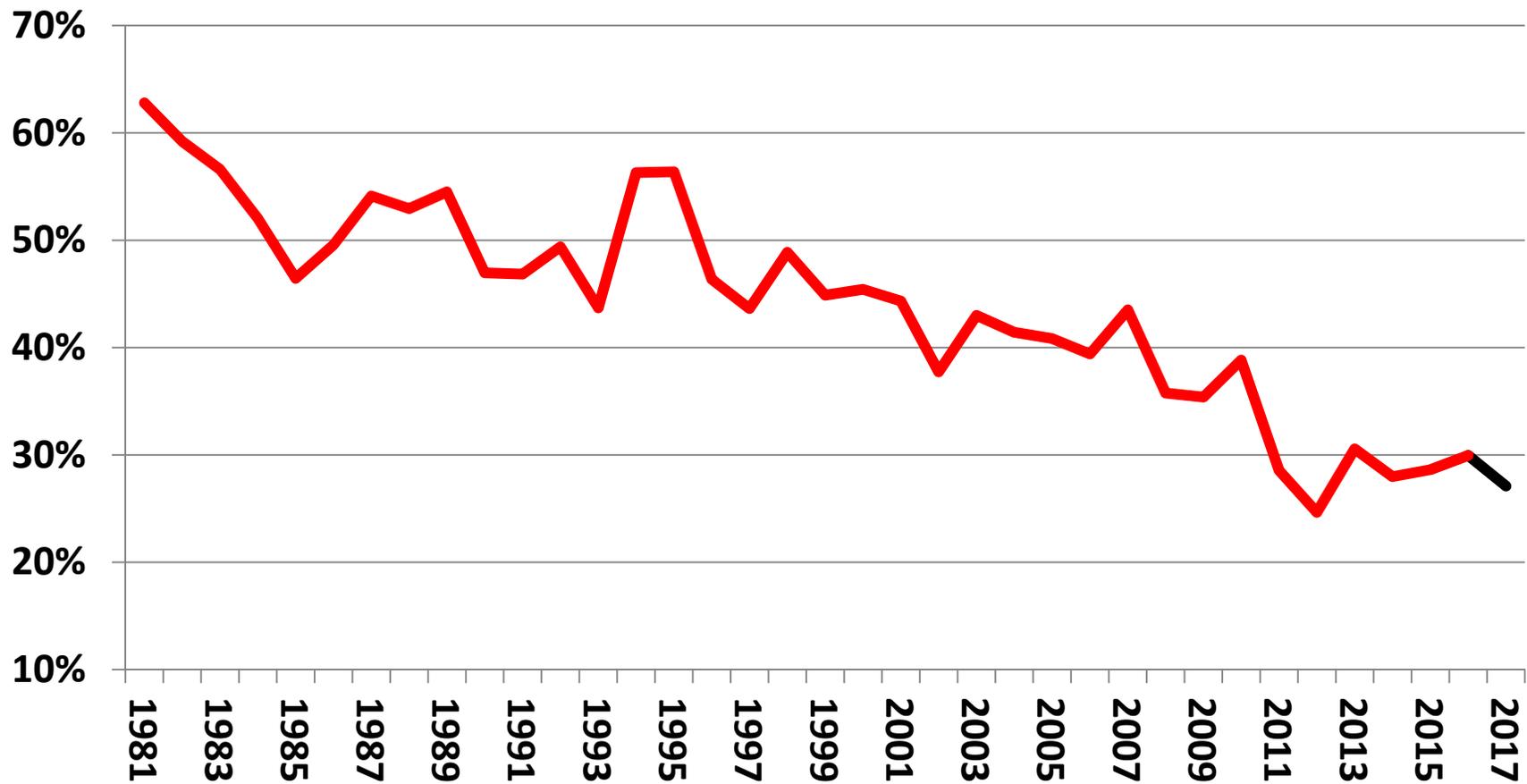
# US Annual Corn, Soy & Wheat Export Demand – Record US Exports 5.3 Bil



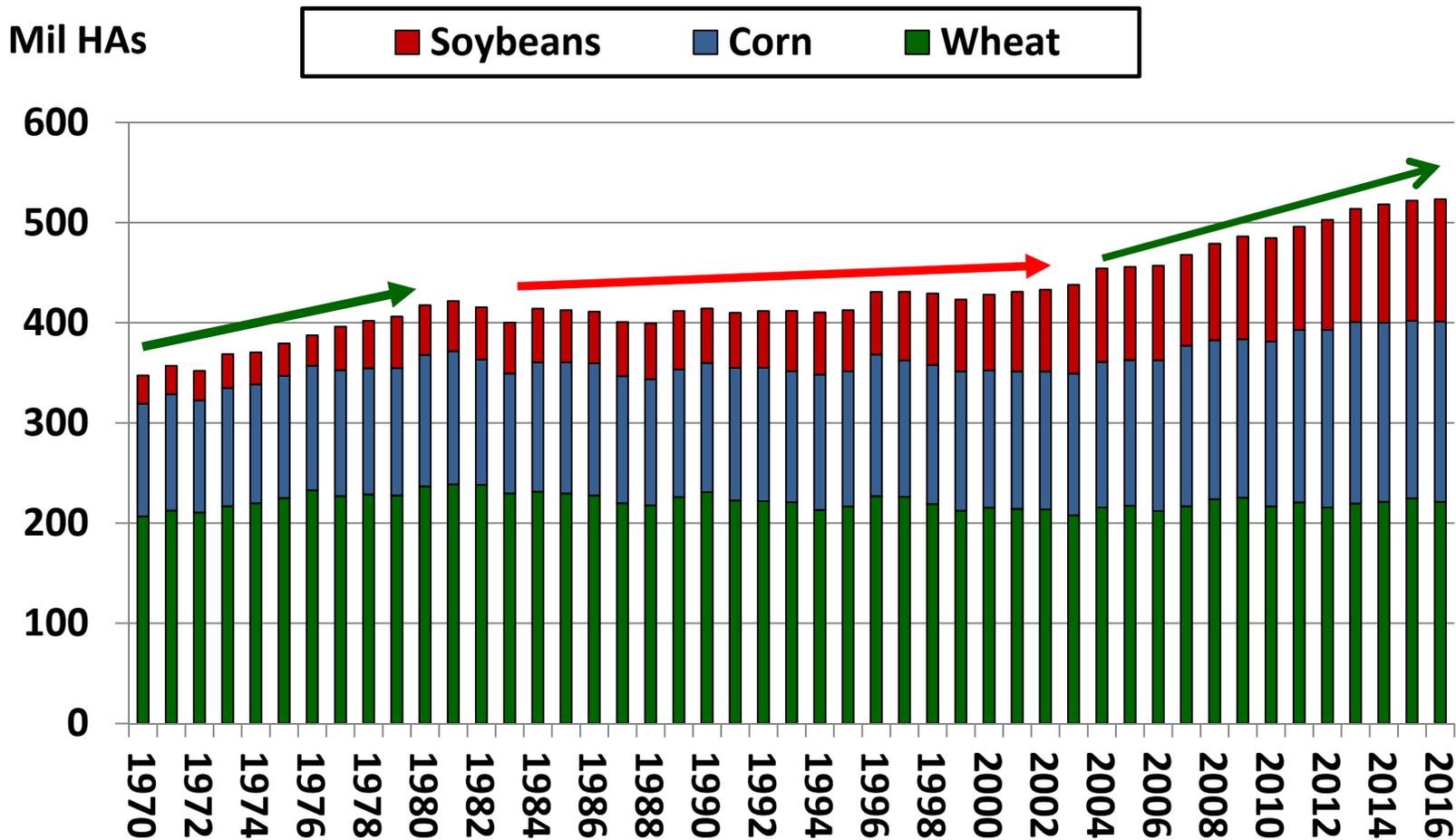
# Brazilian and Argentine Corn Exports since 1990



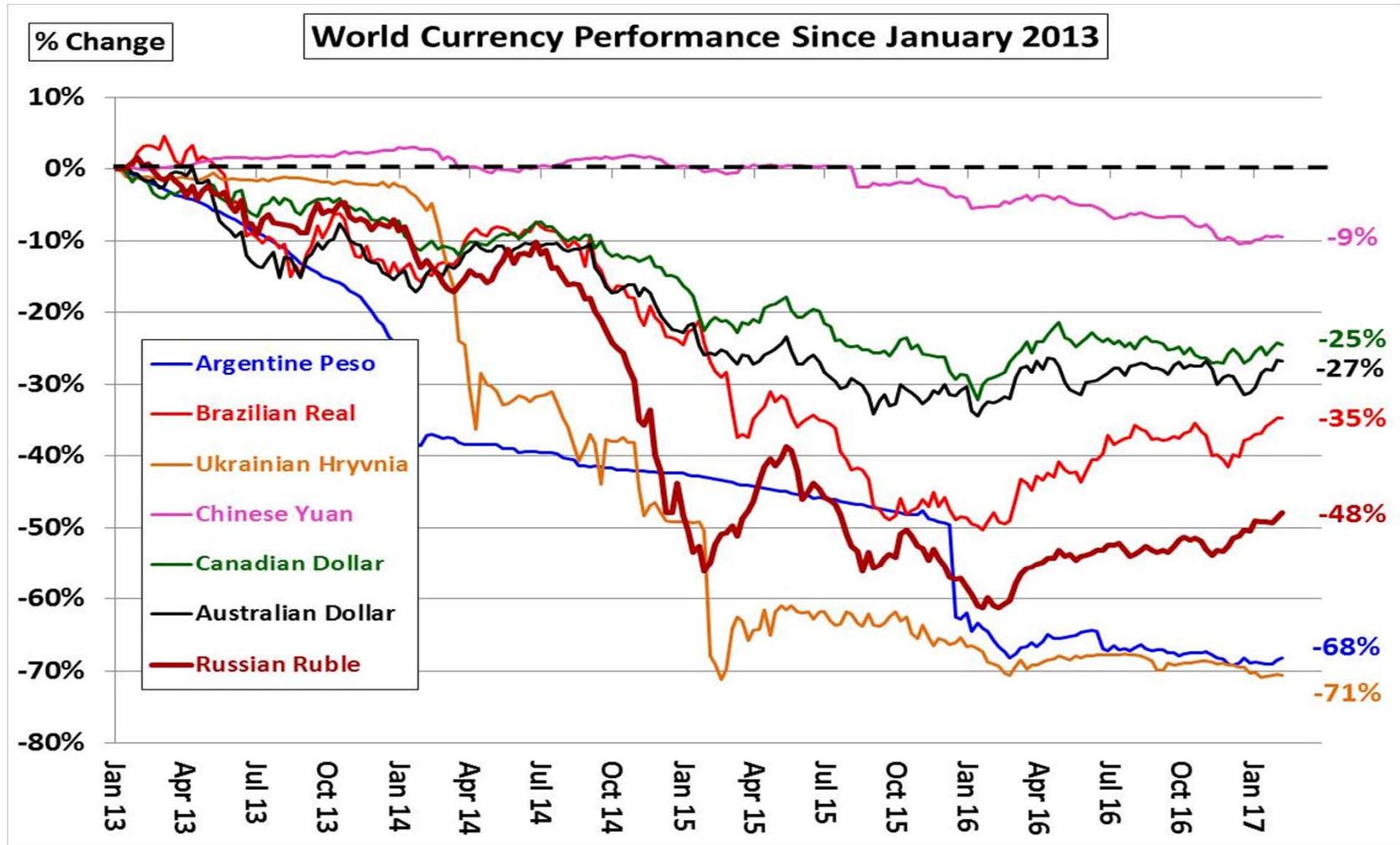
# US Share of World Corn, Soy and Wheat Trade



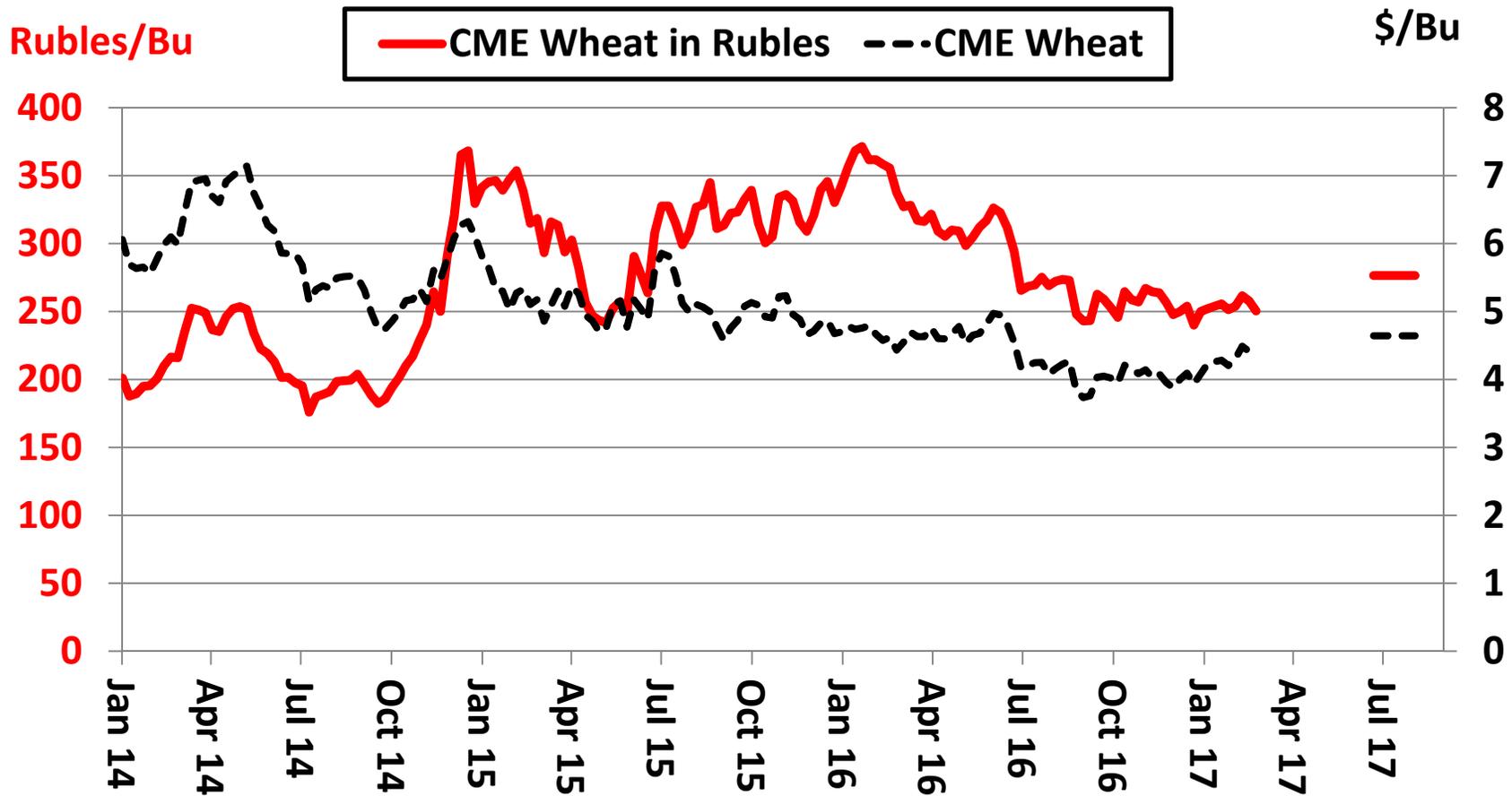
**Global Area Harvested: 523.5 Mil HA– up 1.2 Mil HA (3 Mil acres) in 2016 . The 6<sup>th</sup> consecutive record. The market has to slow future Seeding!**



# Exchange Rates Now Highly Important to Ag Markets – Other’s Ag Productivity

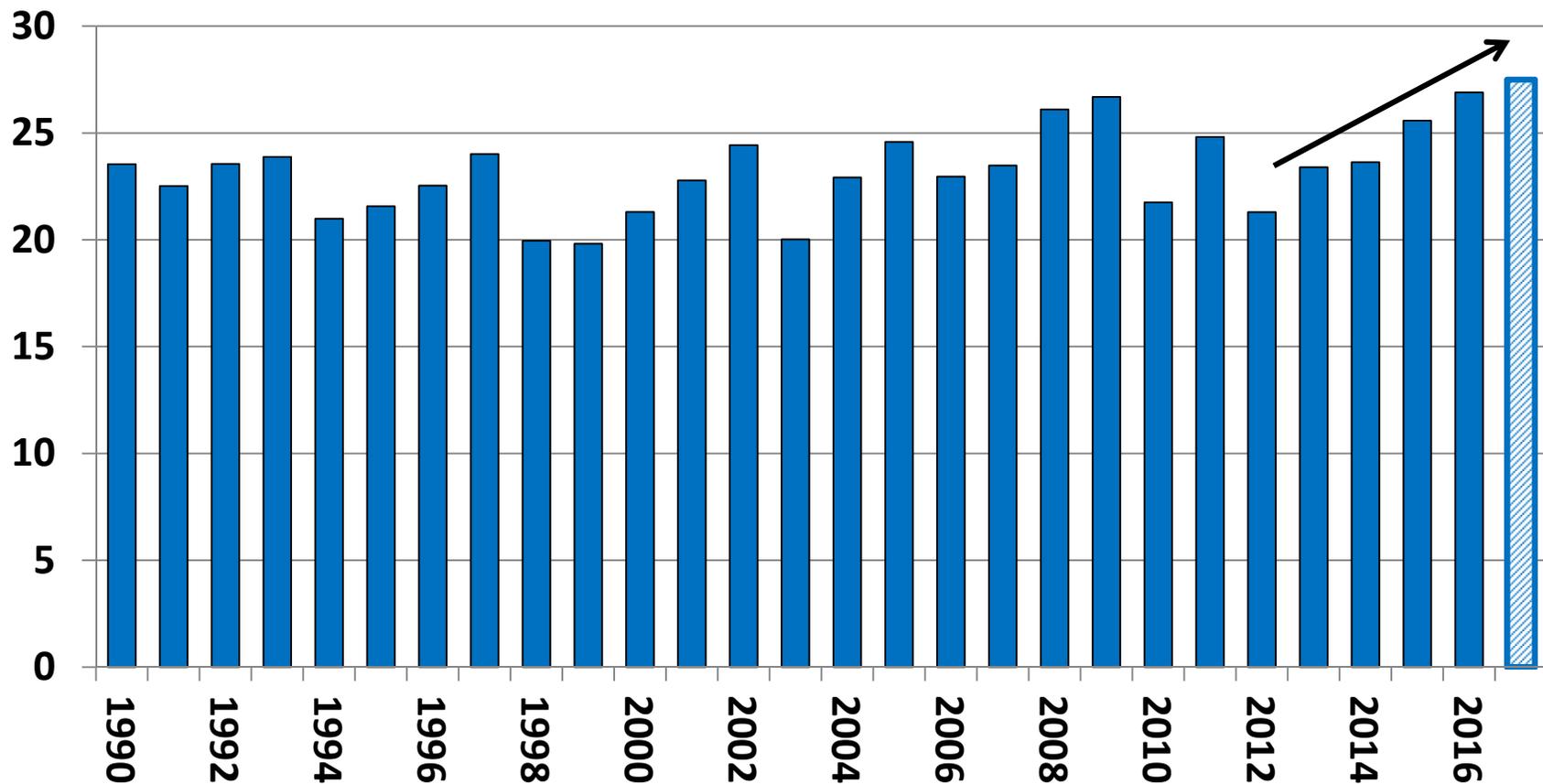


# Russian Farmers Seed 5% More Winter Wheat on Currency

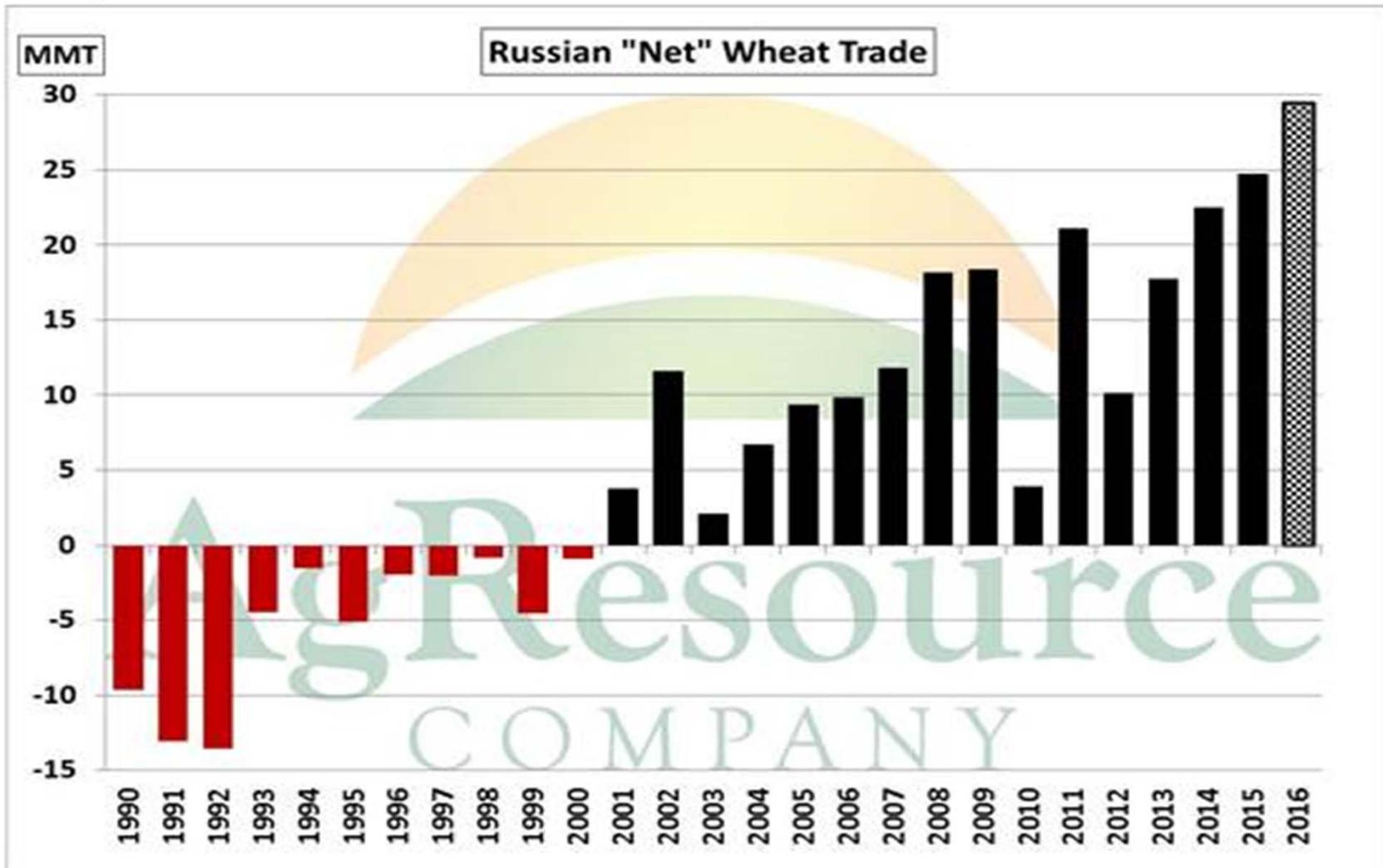


# Russian All Wheat Seeding Since 1990

Mil Hectares

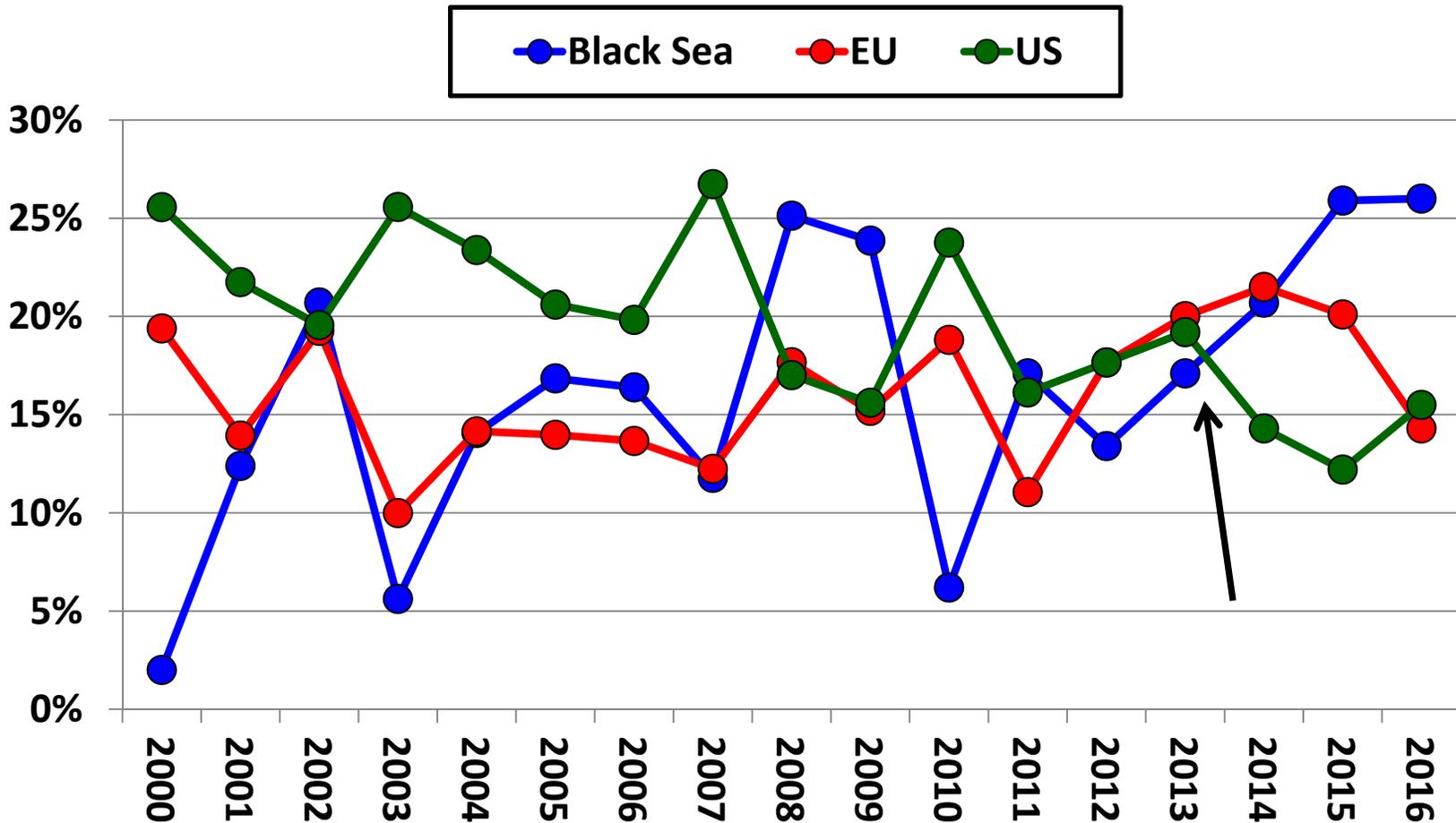


# Russia: A Cold War for US Wheat Exports!

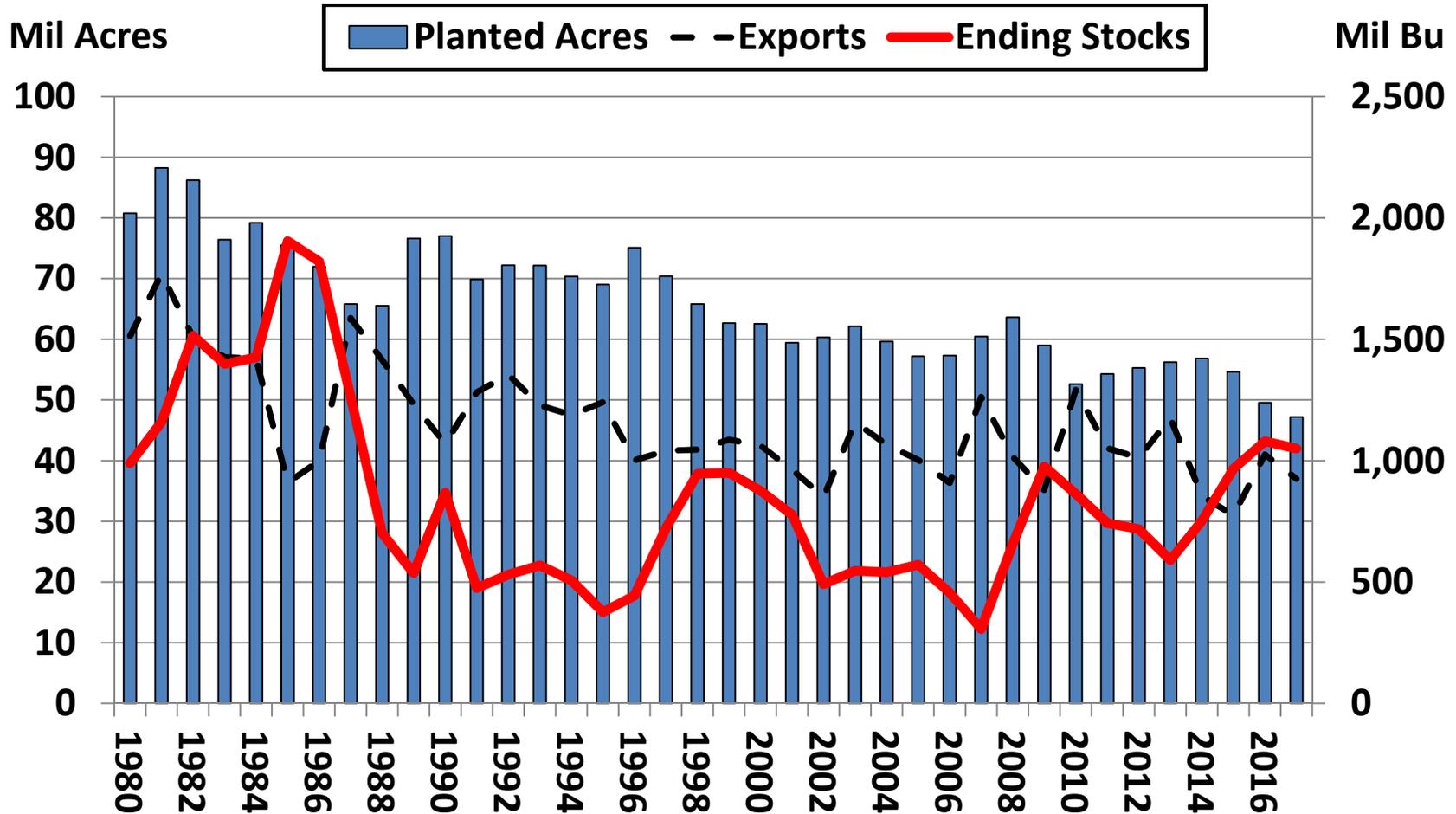


# World Market Share By Exporter

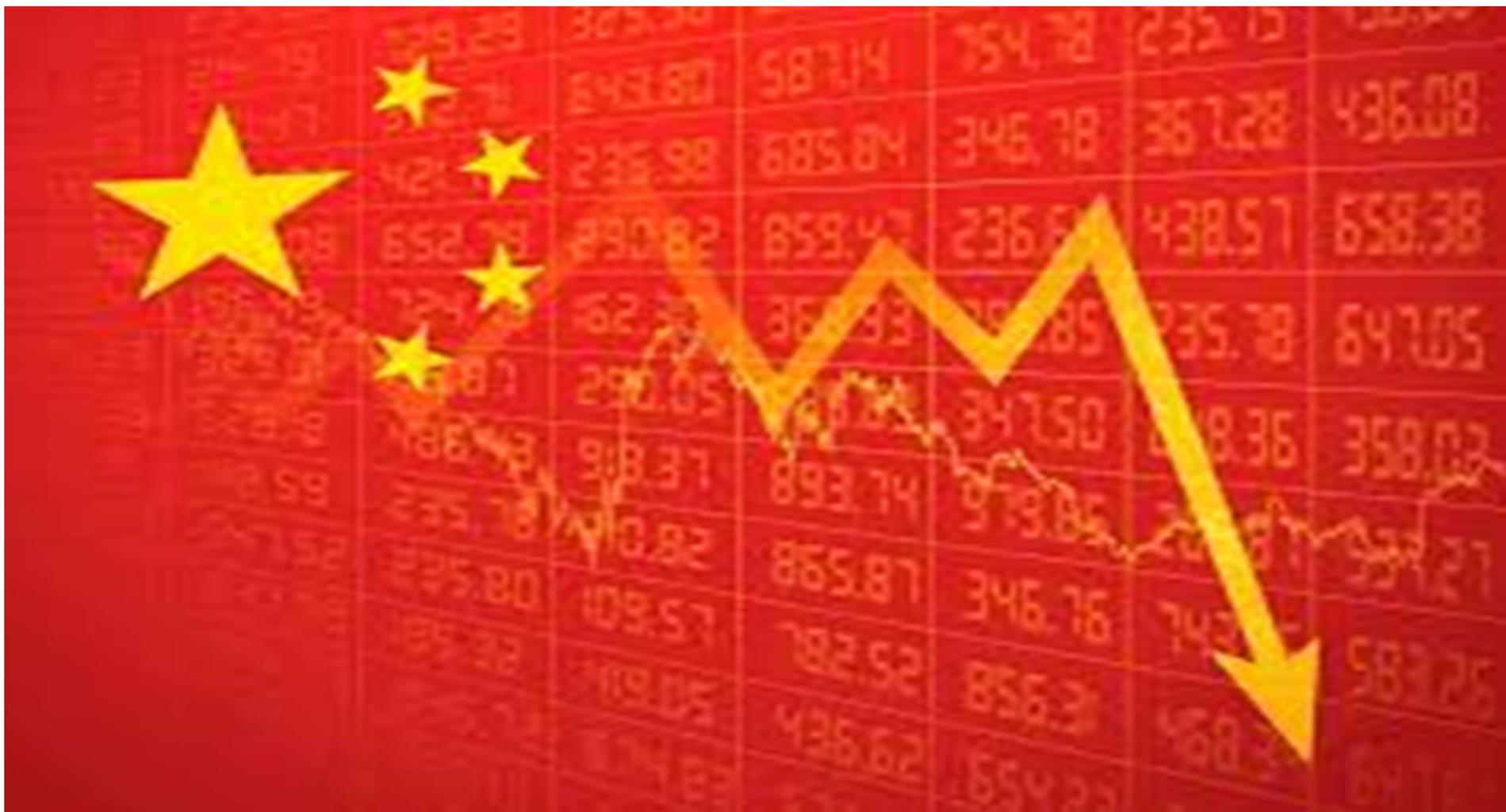
## - Wheat



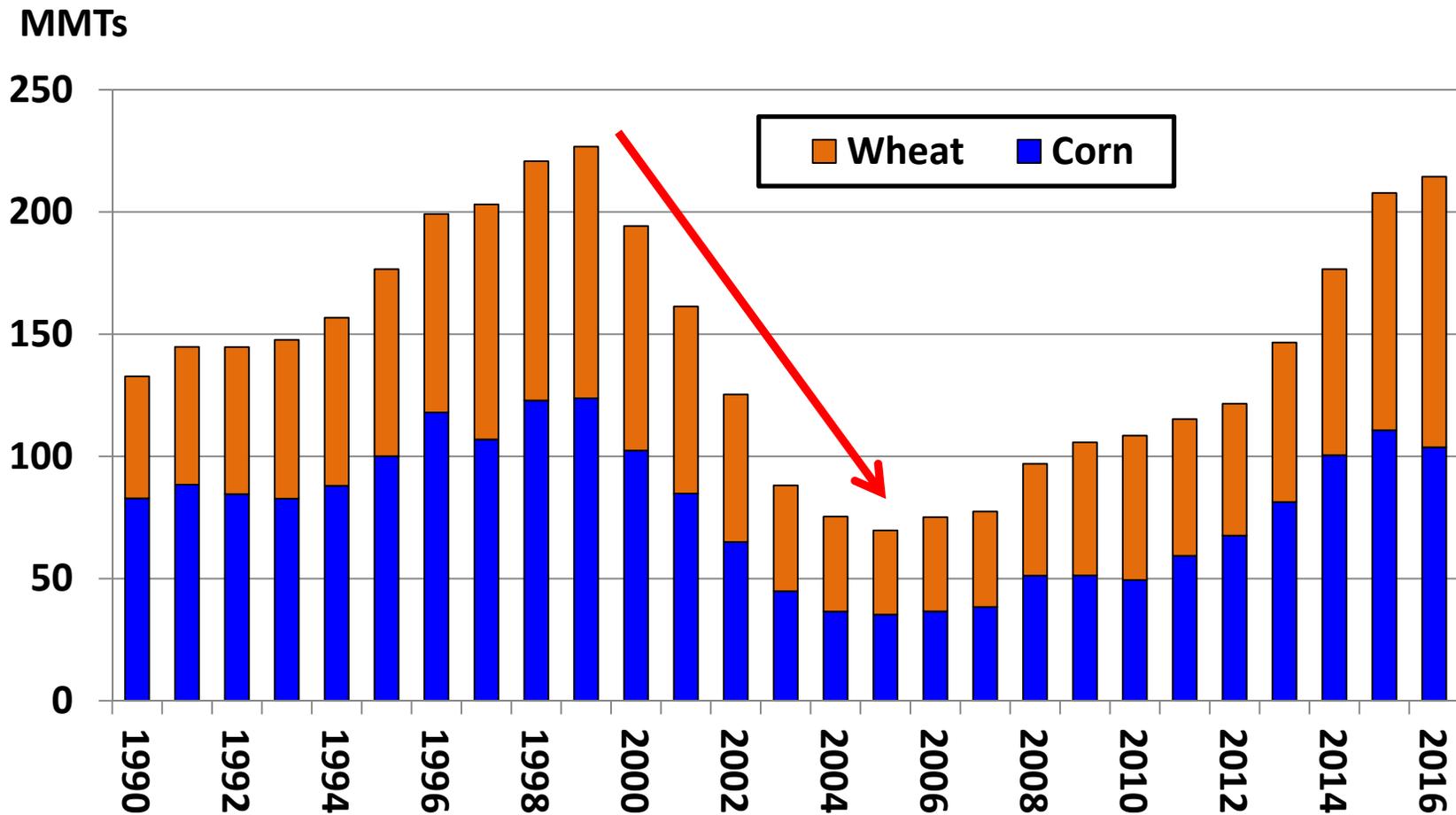
# US Wheat Seeding 2<sup>nd</sup> Lowest since 1900 yet US Stocks 2<sup>nd</sup> Biggest since 1987!



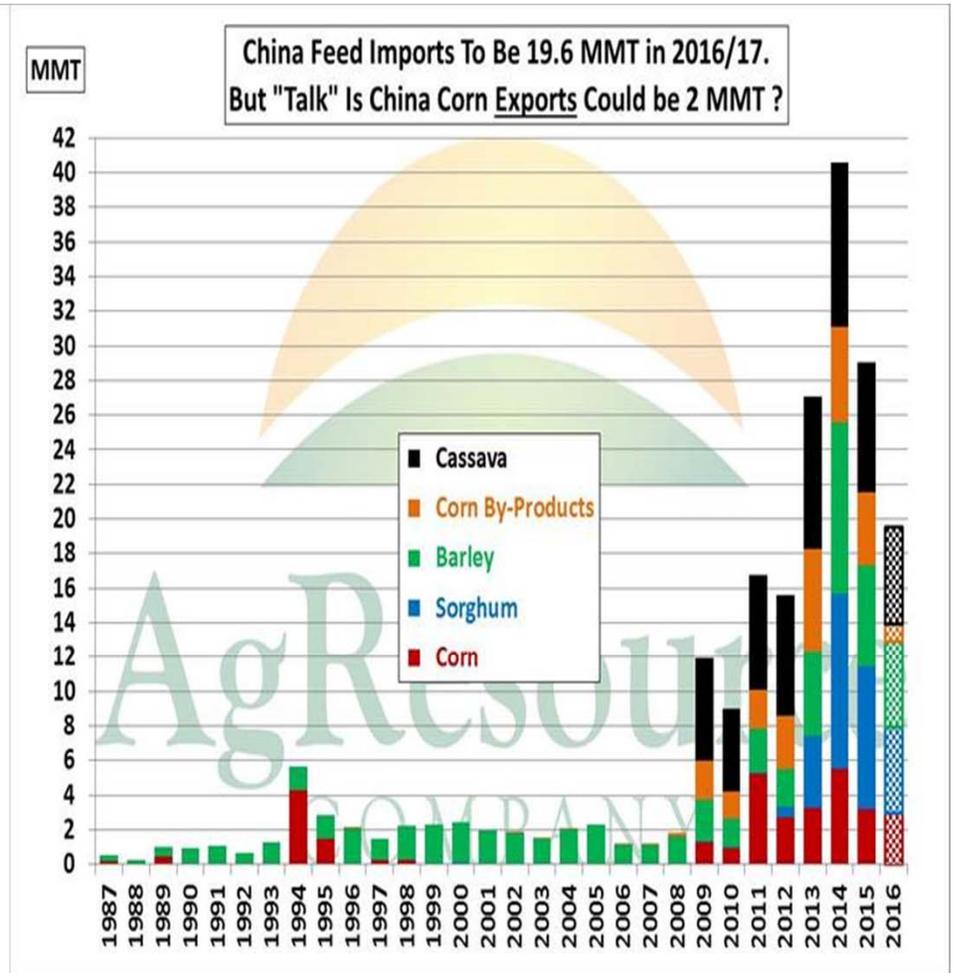
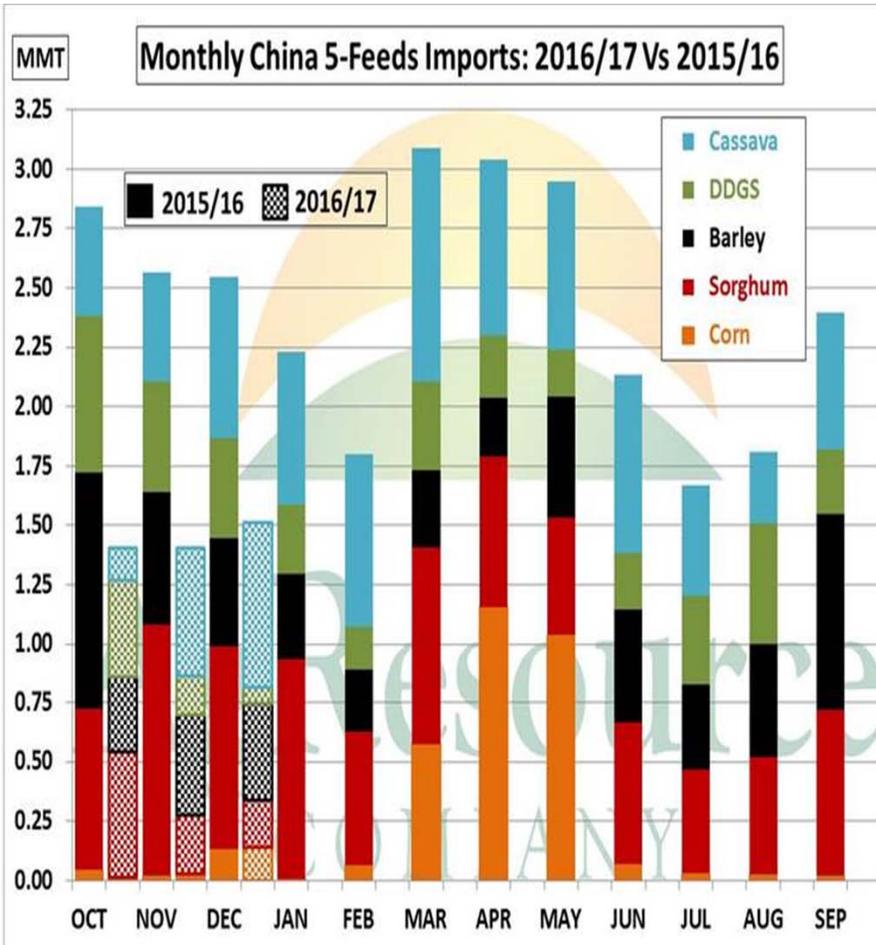
# China's Evolving Farm Program to Limit Imports/Shed Stocks



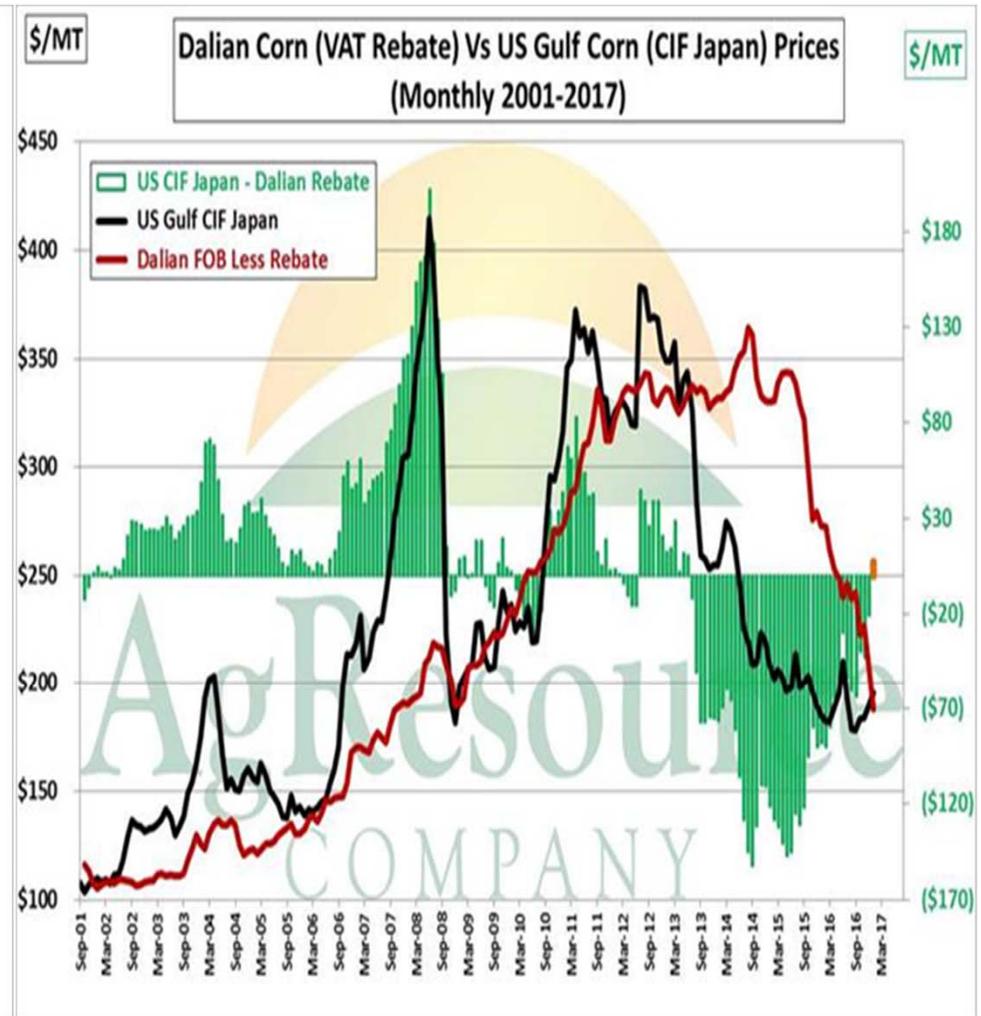
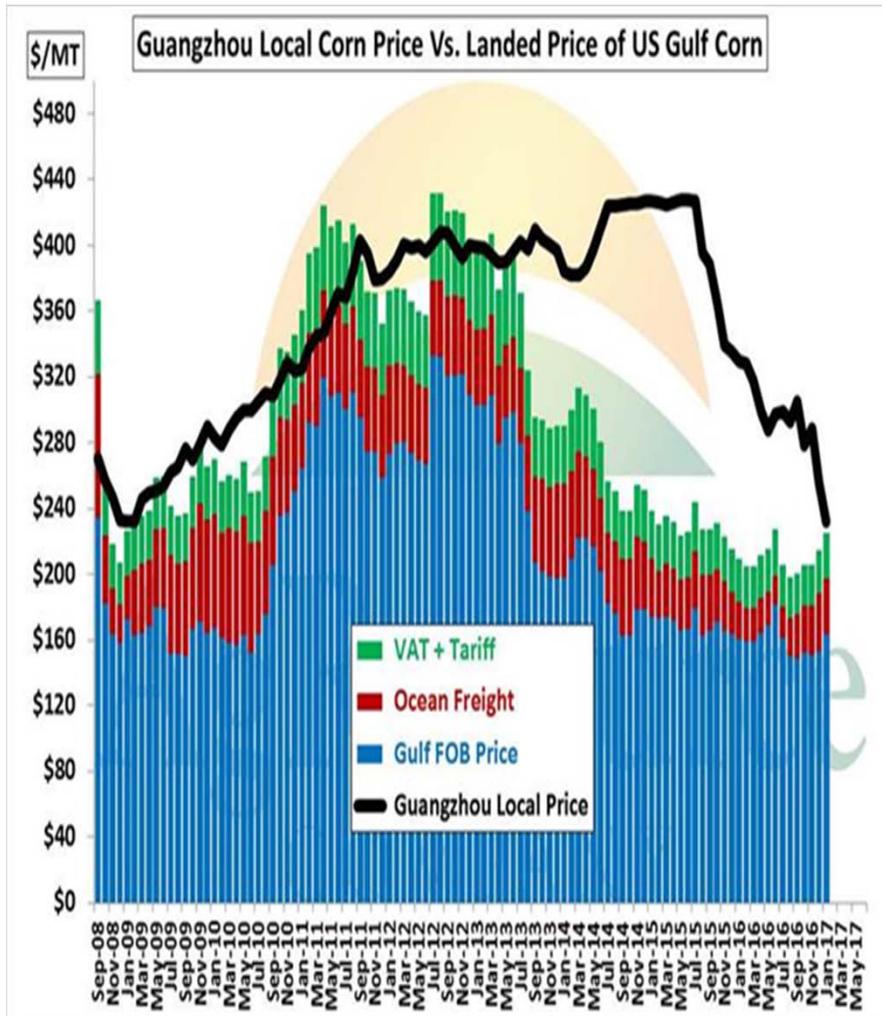
# Chinese Total Grain Stocks Record Large! 6-9 Years to Liquidate?



# Chinese Slowing Feedgrain Imports – Who Will Replace China’s Demand?



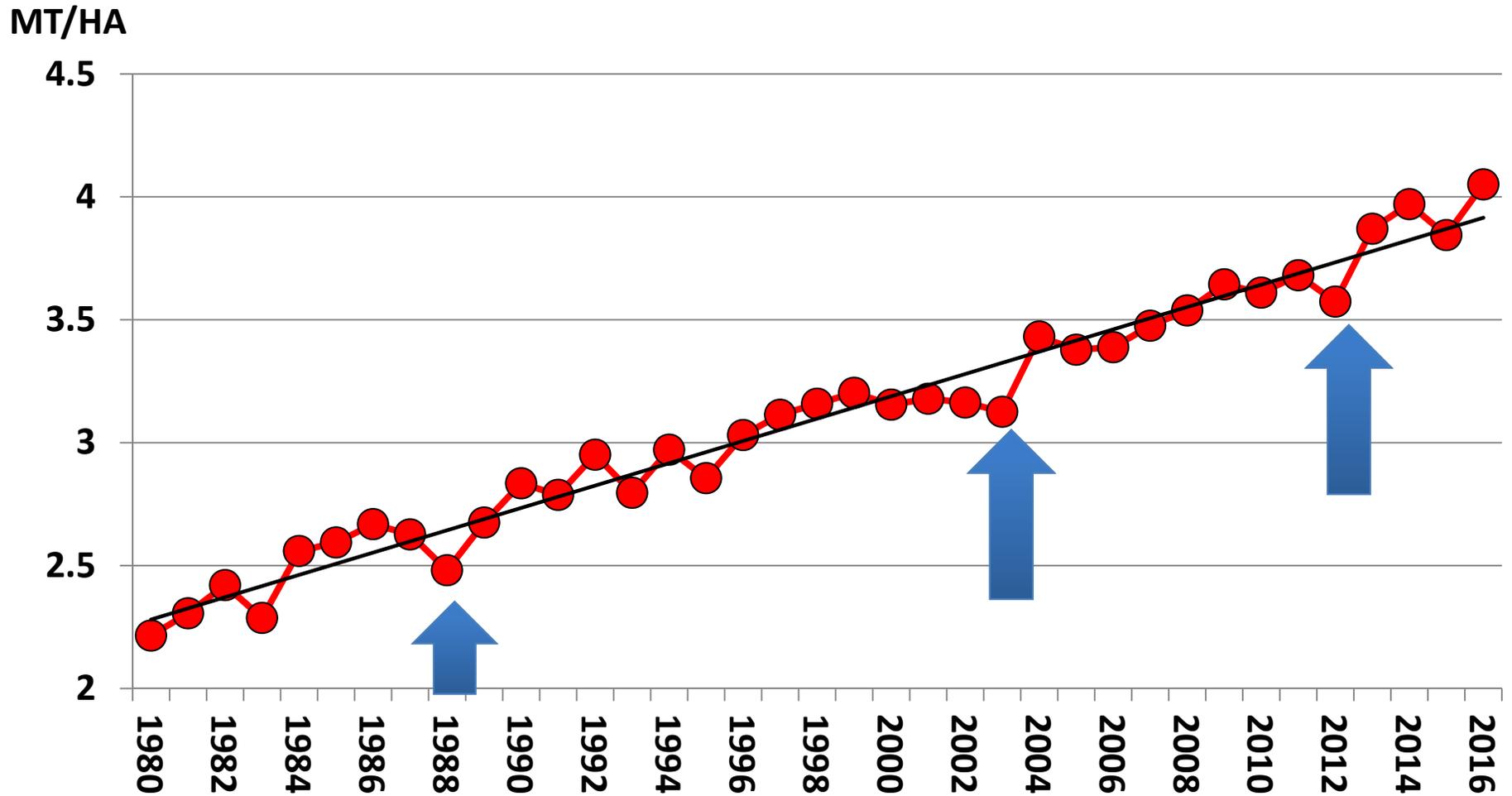
# China to Export Corn in 2017/18? The Fob Spreads Narrow



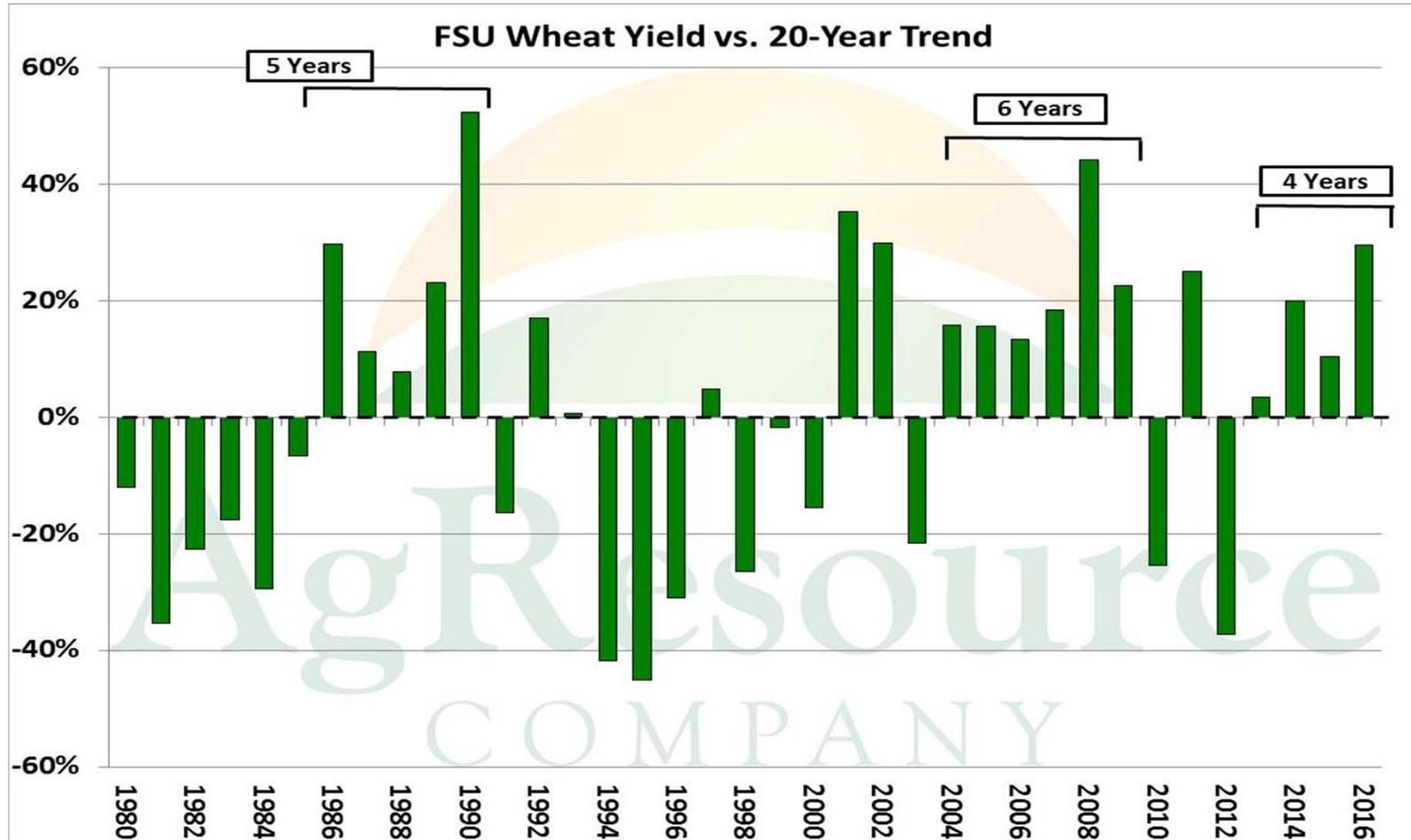
# How Do Years of US Grain Oversupply End?



# Every 7-14 Years a Significant Weather Event Occurs to Rally World Markets



# Black Sea Wheat Yield Trends



**Farm income/supply support (1924 – Today)**

**The US Soils Bank in the 1960's to late 1970's**

**PIK Program 1983**

**CRP Program 1986 idled 36 Mil acres**

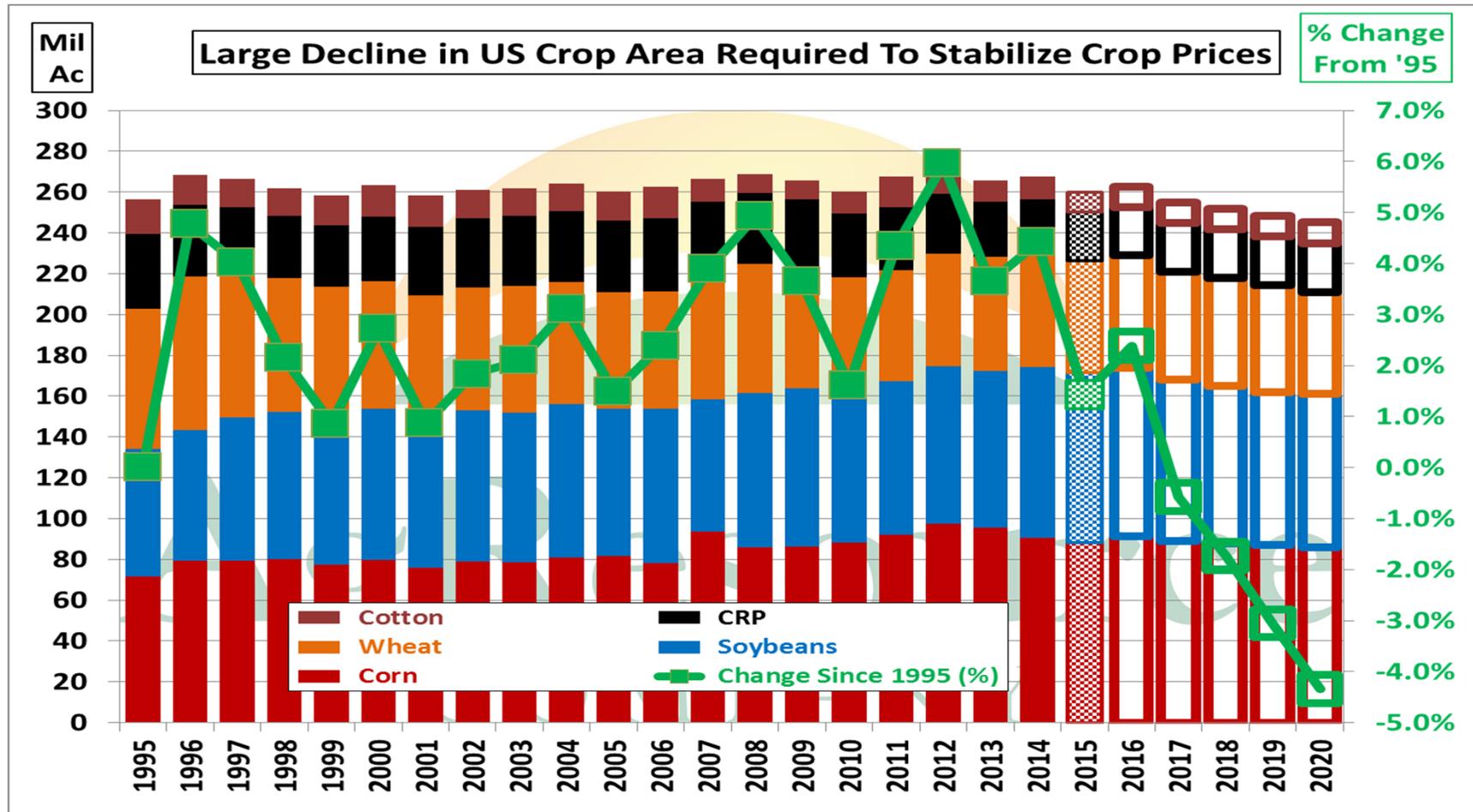
**Set-aside acres to Participate in Farm Program**

**1986-97**

**Freedom to Farm in 1996 Decouple Crop  
production from Gov't Payments**

**2008-2019 Subsidized Revenue Insurance**

# 17-22 Mil Acre Decline Required to Balance US Major Grain Stocks



# Historical of EU's CAP



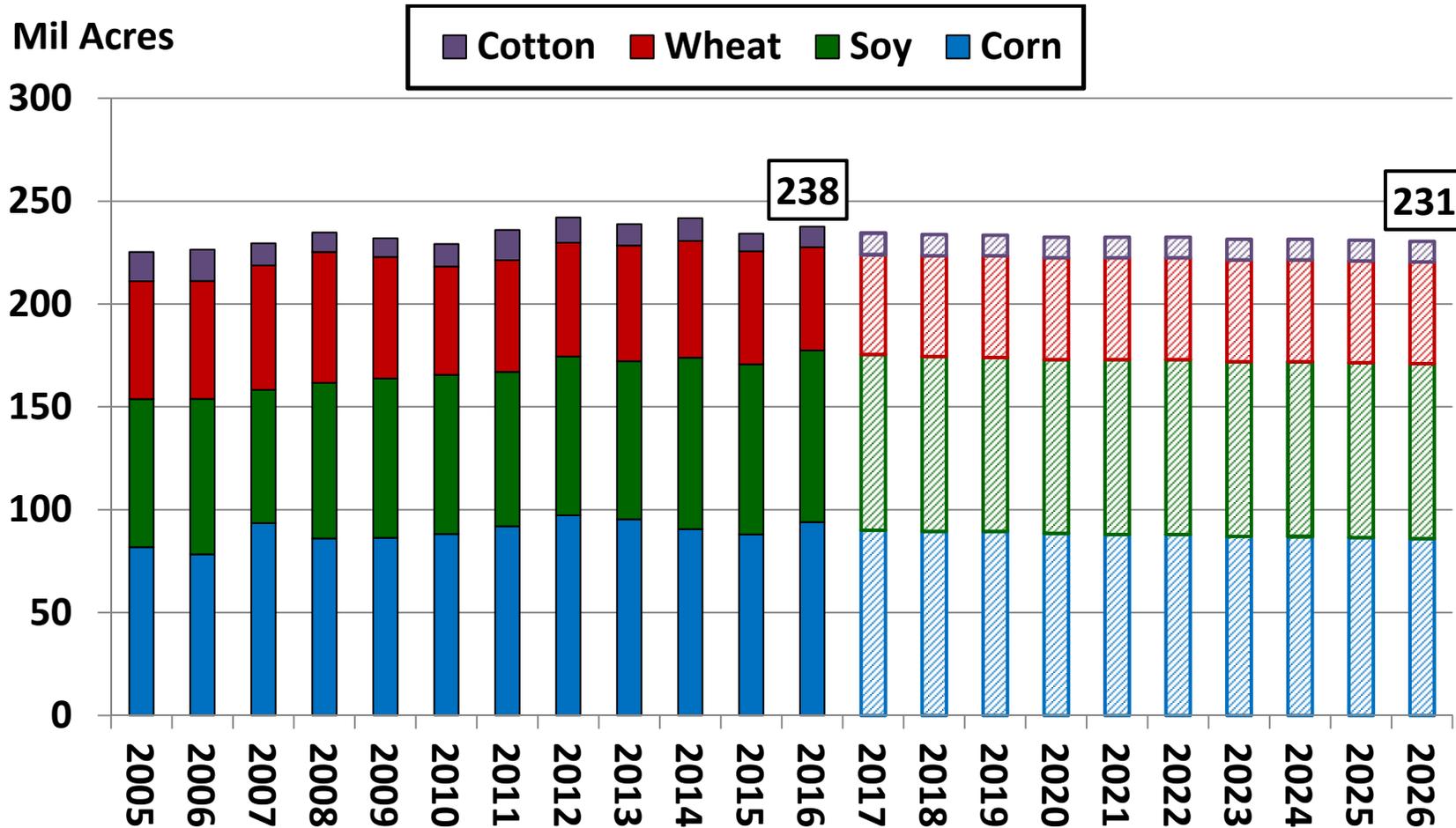
1962 → 70s/80s → 1992 → 2000 → 2003 → 2008 → 2013



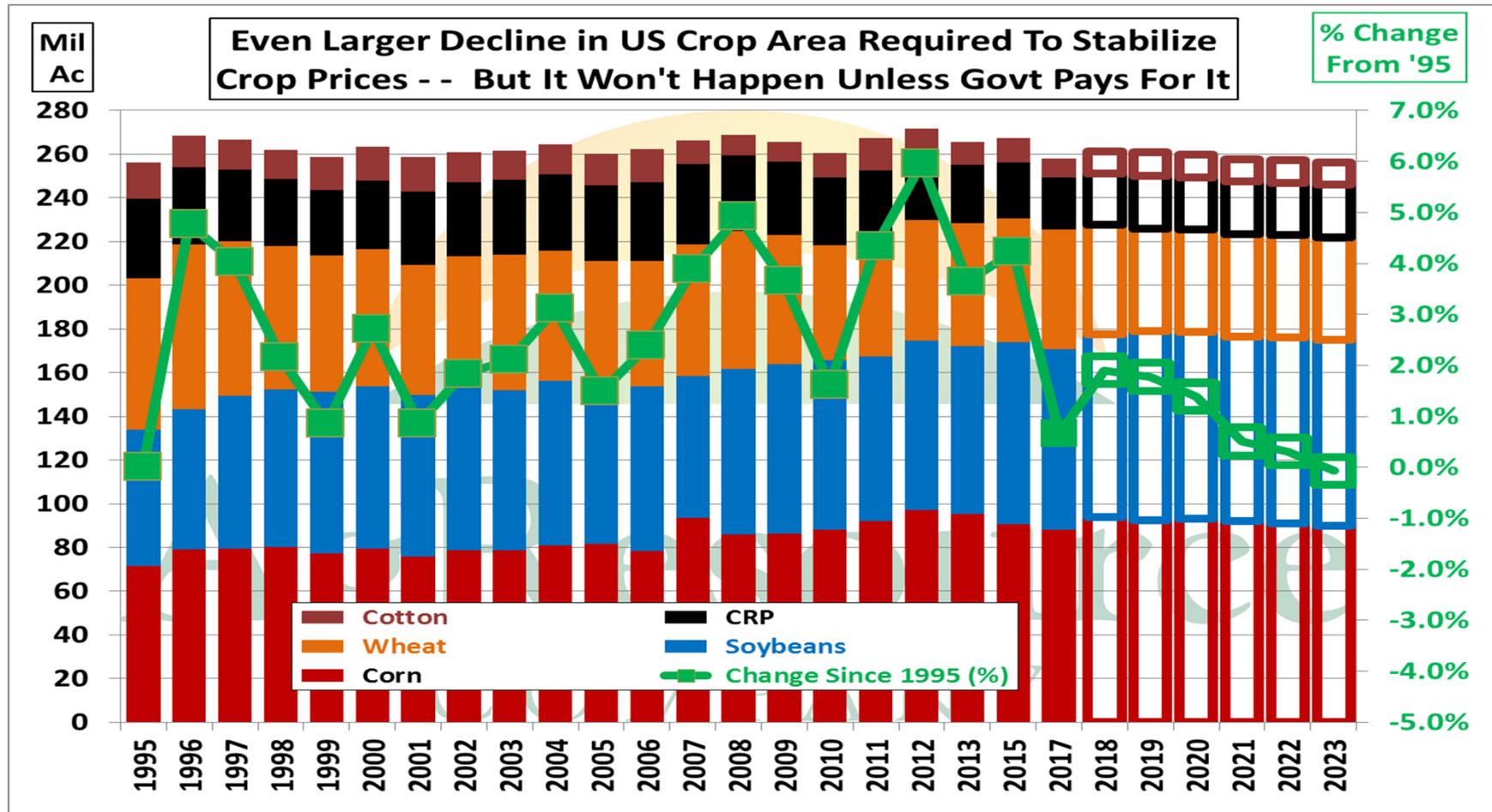
The Early Years (60s)	The Crisis Years (70s/80s)	The 1992 REFORM	Agenda 2000	CAP REFORM 2003	CAP Health Check 2008	CAP REFORM Post-2013
<ul style="list-style-type: none"> <li>Price support</li> <li>Productivity Improvement</li> <li>Market stabilization</li> </ul>	<ul style="list-style-type: none"> <li>Over production</li> <li>Exploding expenditure</li> <li>International frictions</li> <li>Supply controls</li> </ul>	<ul style="list-style-type: none"> <li>Price cuts and compensatory payments</li> <li>Surplus reduction</li> <li>Income and budget stabilization</li> </ul>	<ul style="list-style-type: none"> <li>Deepening the reform process</li> <li>Rural development</li> </ul>	<ul style="list-style-type: none"> <li>Market orientation</li> <li>Decoupling</li> <li>Cross compliance</li> <li>Consumer concerns</li> <li>Environment</li> <li>Enlargement</li> </ul>	<ul style="list-style-type: none"> <li>Reinforcing 2003 Reform</li> <li>Dairy quotas</li> </ul>	<ul style="list-style-type: none"> <li>Greening</li> <li>Targeting</li> <li>End of production constraints</li> <li>Food chain</li> <li>Research &amp; Innovation</li> </ul>

# US Planted Acres 2005-2026

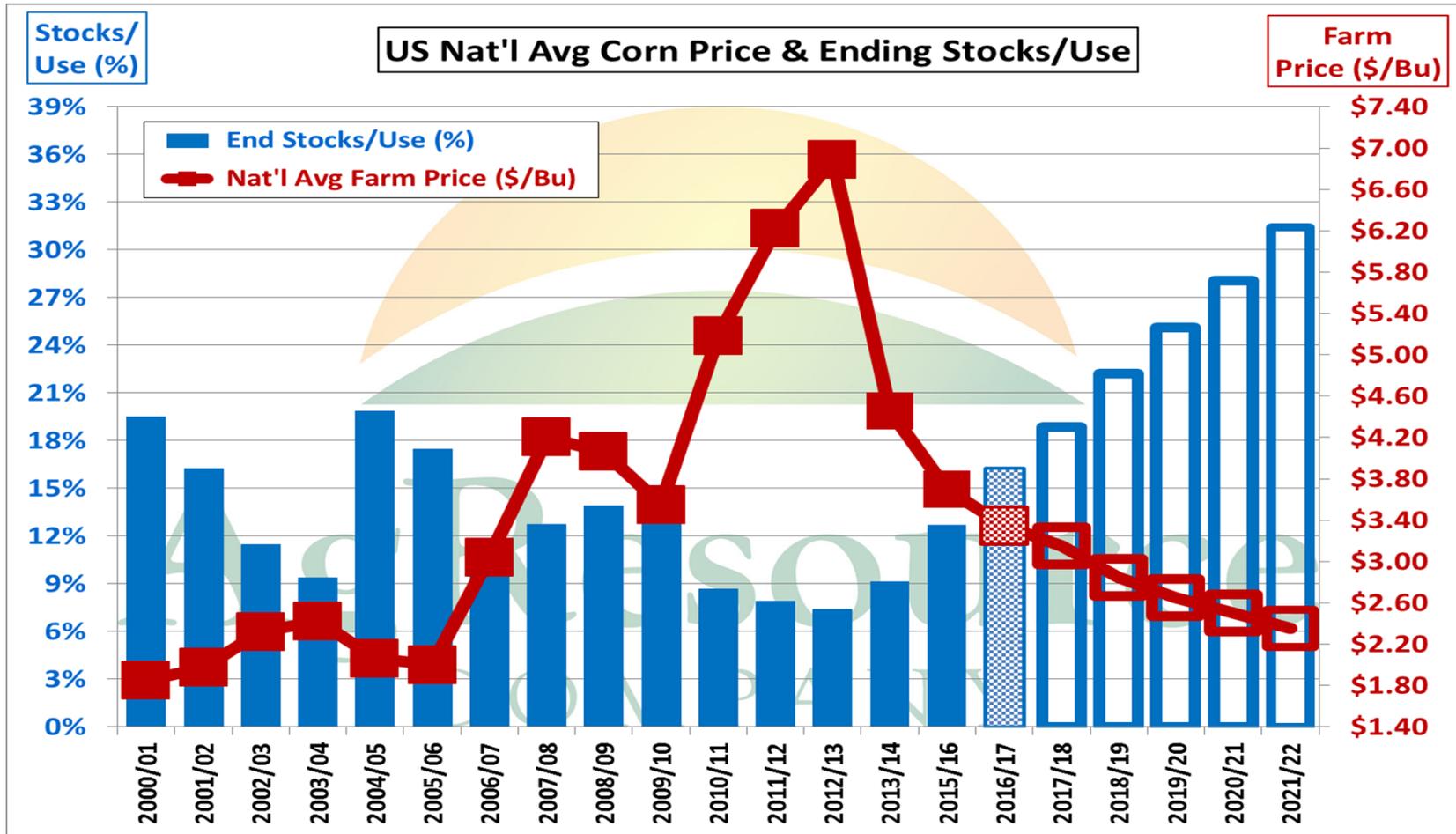
## Includes 10 Year USDA Baseline Forecast



# Baseline Seeding Decline Estimate; Gov't Assistance Needed

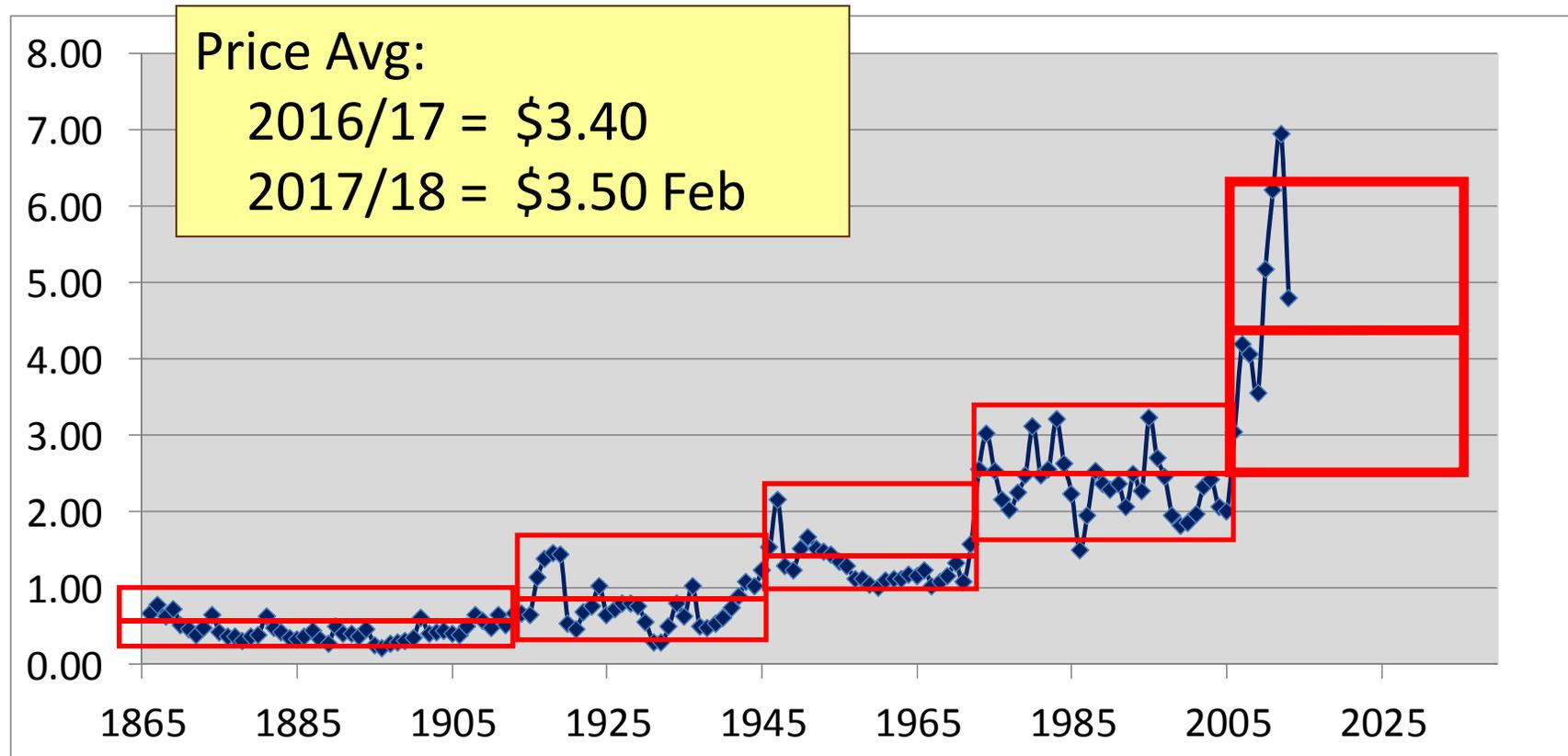


# AgResource 5 Year Corn Price Model Forecast – Assuming Normal Weather

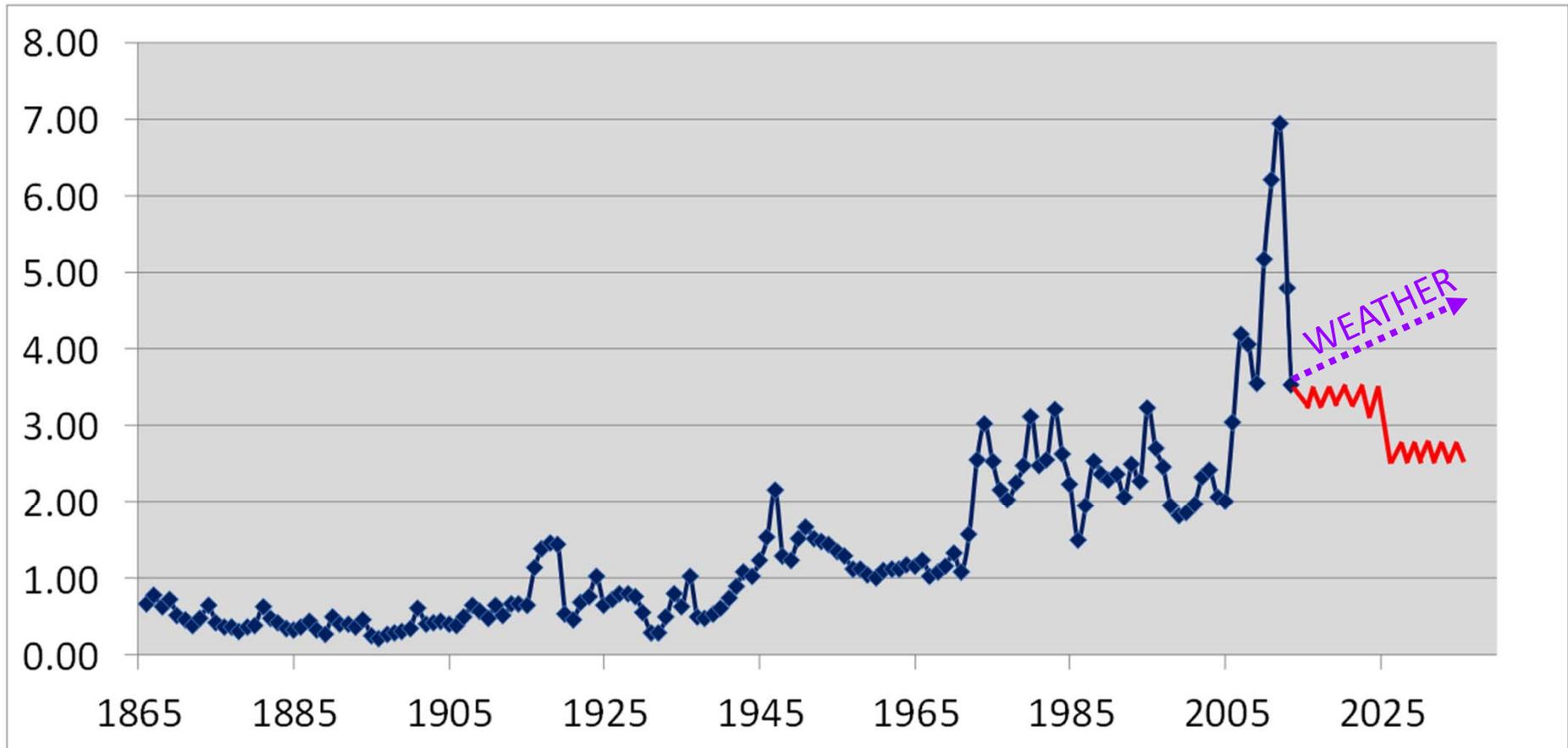


# A New Range for US Corn?

## Nominal Corn Prices, 1866-2014



# A New Range for US Corn Forecast Corn Prices, \$2.50-5.00



# AgResource Summation;

- **US/world corn, soy and wheat markets are oversupplied. But its been a 4 year bear market and prices are already deemed as cheap heading a new growing season. This supports values into spring, but prices will decline farther with normal Northern Hemisphere weather.**
- **China slowing grain imports, but raising soybean imports due to the lack of DDG's and need for additional soymeal. Record large US soy seeding pushes soy to oversupply in the last half of 2017.**
- **The US Big Crop/US Big Export Demand ends with enlarged S American export competition this spring and into 2018. US grain and soy export share will decline, unless there is a sharp fall in USD?**
- **Sustained US/world grain rallies only occur with adverse weather – a significant loss of supply in a key exporter or importer nation.**
- **US Gov't Policy is demanded to curtail US grain seeding by 17-22 Mil acres. Difficult time for US farmers as strong USD maintains profitability of non US farmers. The world only needs 1.8% more grain to meeting rising caloric intake and population expansion. World ag productive capacity is rising at a rate of 2.8-3.0% . Ag Policy choices are difficult!**



It's not enough to know the news.

You need to trust the analysis.

# Thank You

