

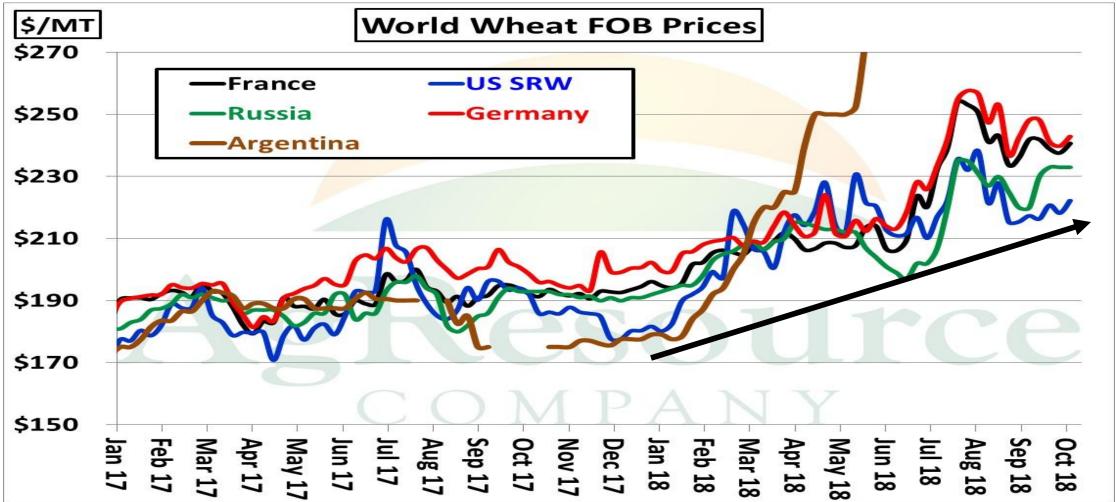
Trump Tariffs, Declining Global Wheat Stocks Offers Dynamic World Grain Market in 2019

2018/19 Wheat Market Themes



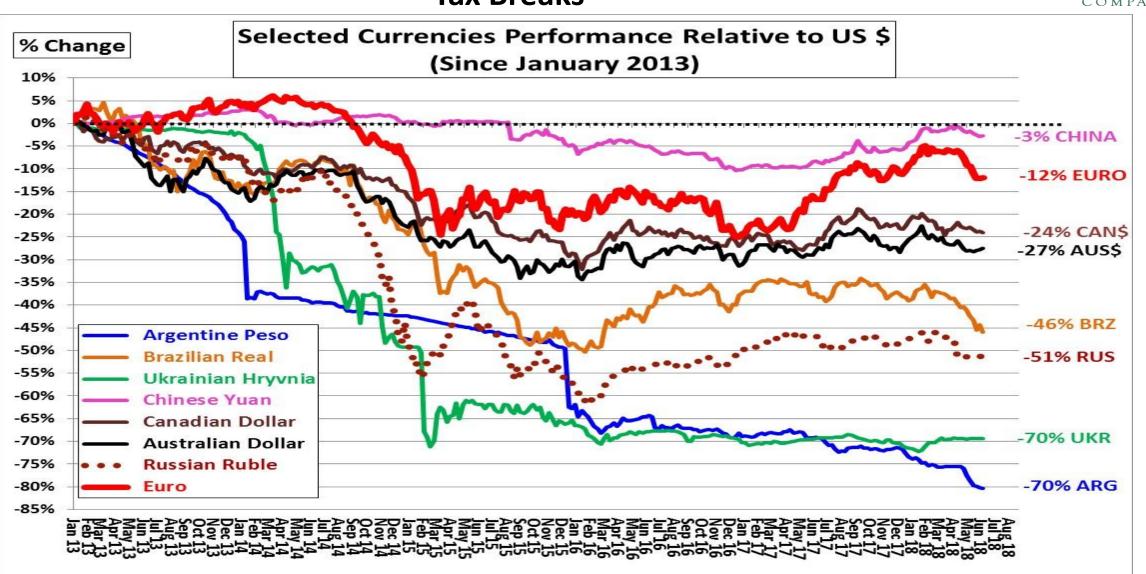
- World Political/Economic "Order" is in "Disorder!" Central Banks are normalizing interest rates. Politically, we have Brexit, President Trump, regional protectionism on trade and uncertain politicians (Putin/Erdogan/Macri). Grain markets will endure heightened financial risk/volatility during 2019!
- This Year's Ag Black Swan Event was US Trade Sanctions. China was the largest US market for ag goods in 2017 at \$19.6 Bil. China offered to secure an additional \$30-35 Bil of US ag goods in coming years (mid May) along with \$35-40 Bil of energy. Trump Admin said yes and then no in a high stakes game of poker via IT protection/2025 fight. China is needed to start the next ag demand bull marketplace.
- World Exporter Wheat Stock/Use Ratio Nears Record Low This makes 2019 wheat production highly important.
 World exporters need to produce at least trendline wheat yields/production to keep order in world wheat prices.
- World weather patterns are changing. Climate change is real and starting to be better understood by science. Learning point, there will more areas that endure acute flooding and drought in the years ahead. 2018 was "globally" unfavorable with the loss of over 35 MMTs of major world wheat exporter production!
- World wheat and corn trade ramping up. New demand drivers are emerging world wheat trade has grown nearly 90 MMTs during the past decade. Excluding China's corn/wheat stocks and US trade disputes, the outlook for feed/grain prices is brightening. At some point, the US and China will resolve their trade differences and boost mutual trade as called for by WTO. World minor feedgrain prices are soaring don't be short of oats/barley! The market demands additional wheat/minor grain seeded acres in 2019..... and beyond! Market sediment is slowly changing.

World Wheat Prices To Score New Rally Highs in 2019?



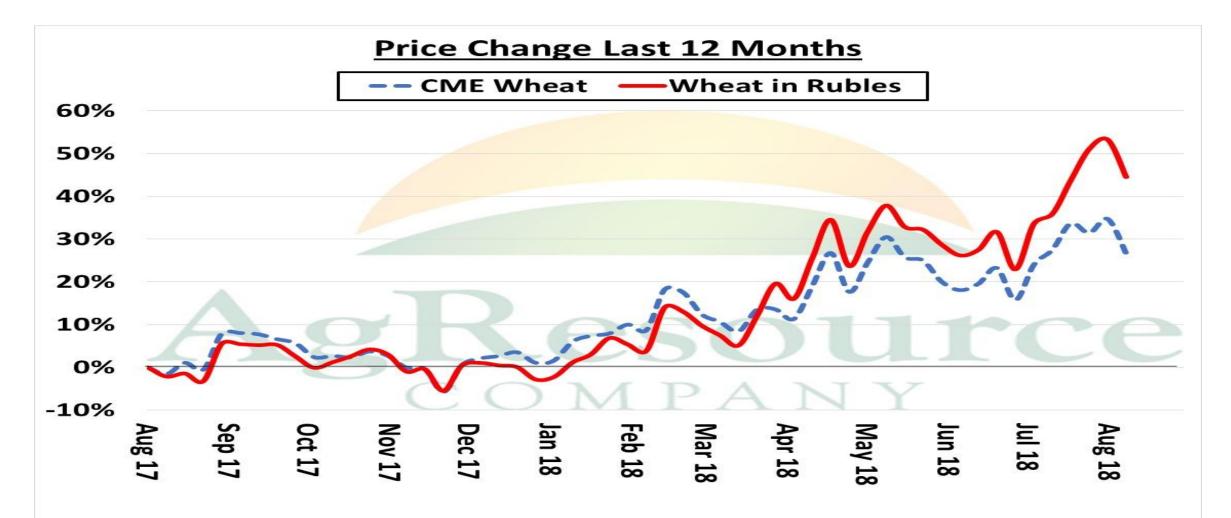
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A drag is the US Dollar Rise based on Strong US Economy – Trump Tax Breaks



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Russian Wheat Farmers Enjoy 45% Gain in New Crop Wheat Profits – Record Large Winter Seedings?



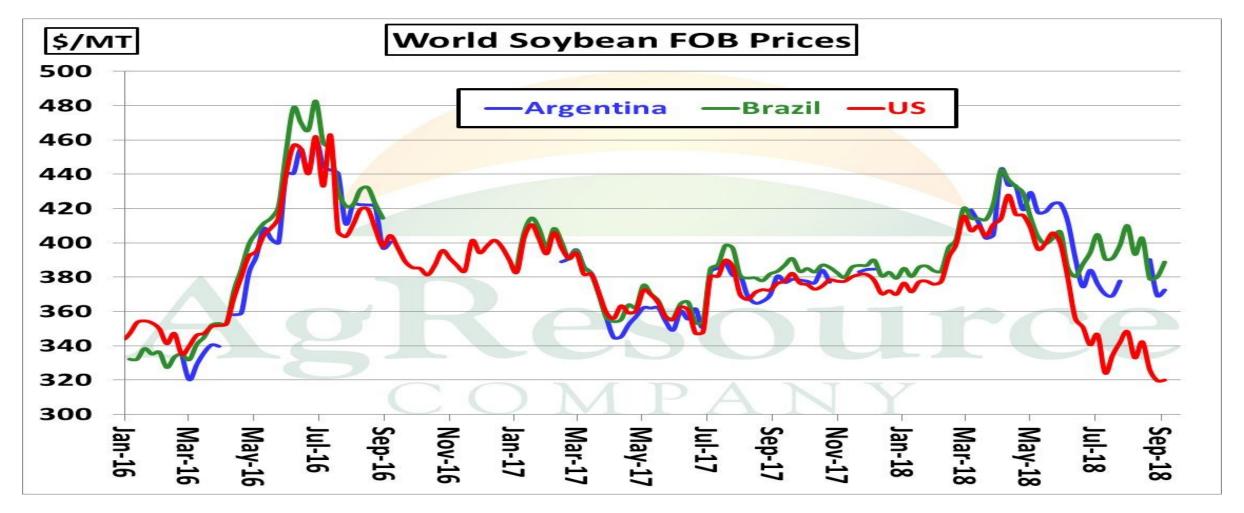
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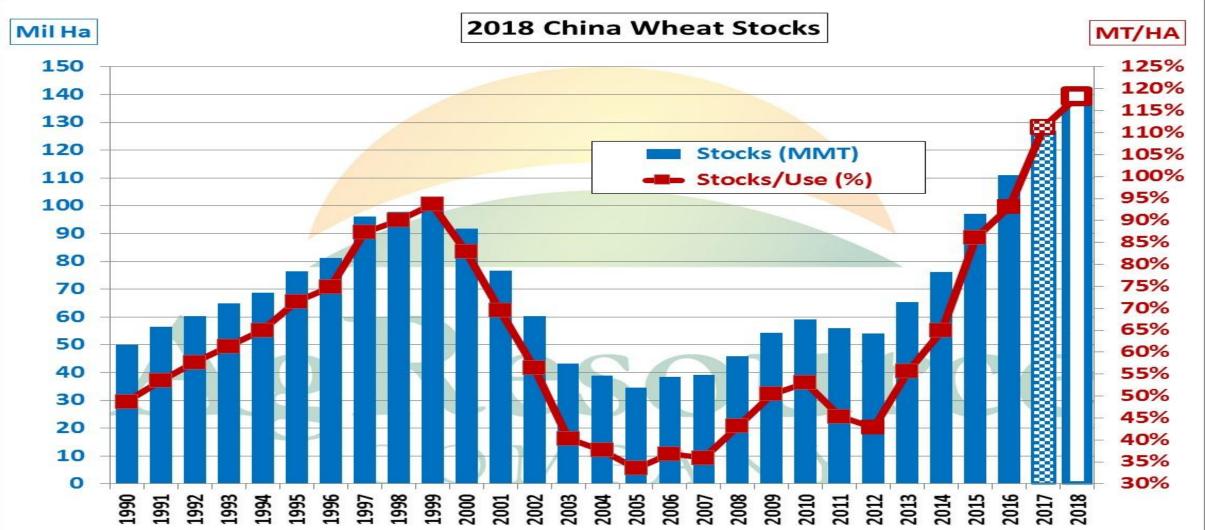
Two Distinct World Soybean Markets Form – Brazilian Farmers Rejoice/US Farmers Fret!





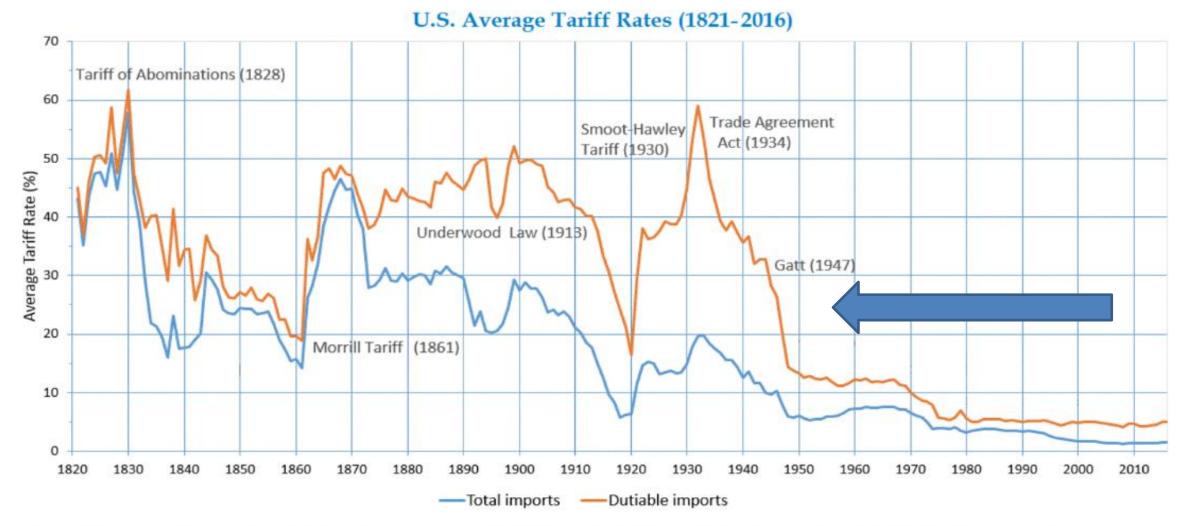
China Holds 50% of World's Wheat Stocks – The Need for Feed Wheat?

AgResource



US Tariffs Rising Back to Threatening Levels





Source: US Departement of Commerce, Bureau of the Census, Historical Statistics of the United States 1789-1945, U.S. International Trade Commission, dataweb.usitc.gov



Free Trade Has Produced Huge Benefits since GATT started in 1940

Extreme poverty is defined as living at a consumption (or income) level below 1.90 "international \$" per day. International dollars are adjusted for price differences between countries and for price changes over time (inflation). World Population Billions 8 6 5 **General Agreement** on Tariffs and Trade People NOT living з in extreme poverty 2 People living in extreme poverty 1820 1840 1860 1880 1900 1920 1940 1960 1980 2000 2015

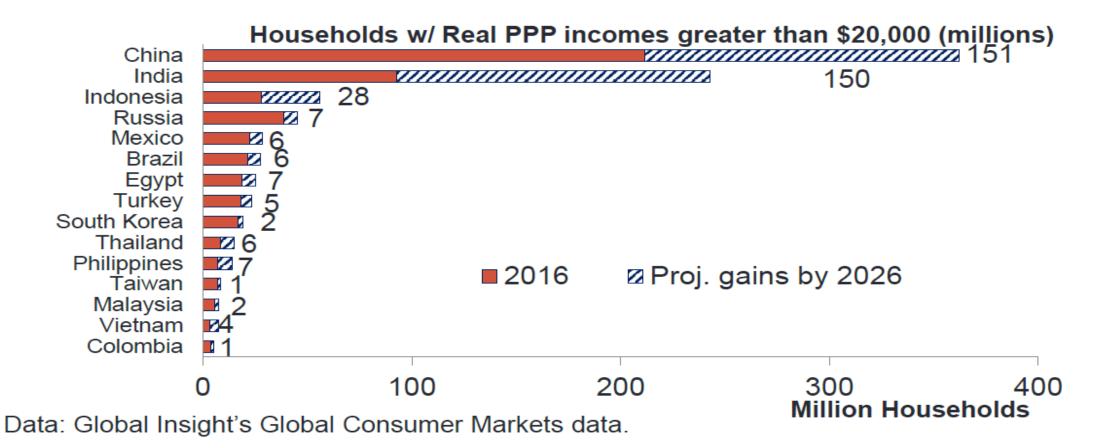
World Population Living in Extreme Poverty, 1820-2015

Source: 1820-1992 Bourguignon and Morrison (2002) Inequality Among World Citizens 1981-2013 World Bank data Max Roser and Esteban Ortiz-Ospina (2018)

China and India Drive Improved World Food Demand into 2026?

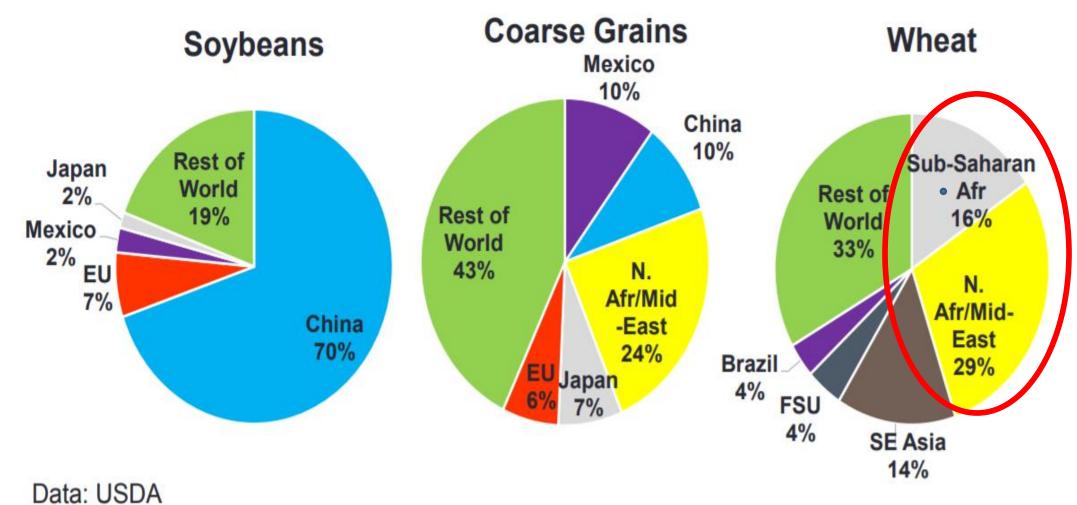


Income growth will drive increased global demand





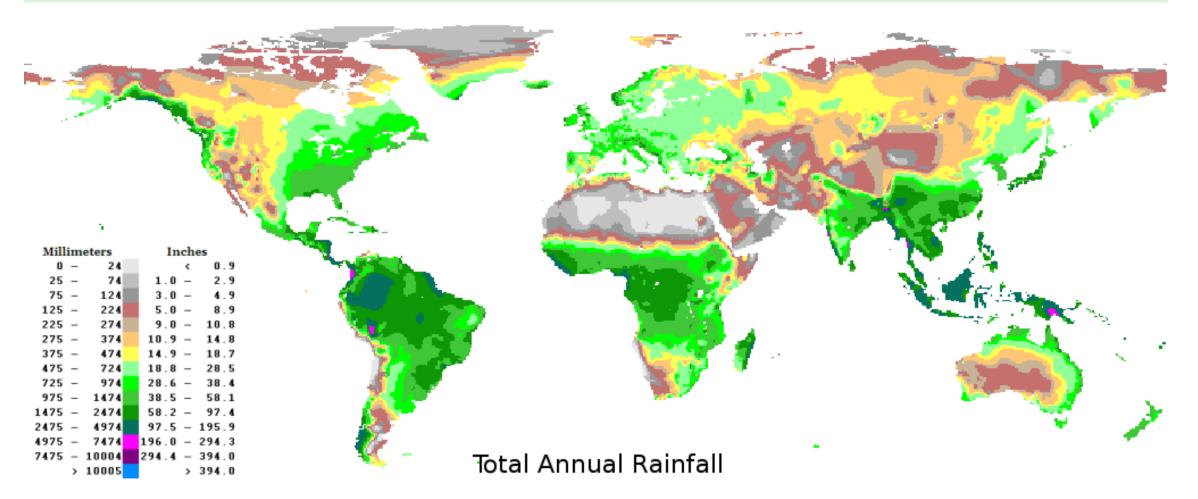
2027/28 World Grain Trade Forecast: China Soy Import/Mideast/African Wheat Rise





Blessed with Water- China Could Turn to Africa! AgResource The need for Infrastructure/Tech?

Total Rainfall

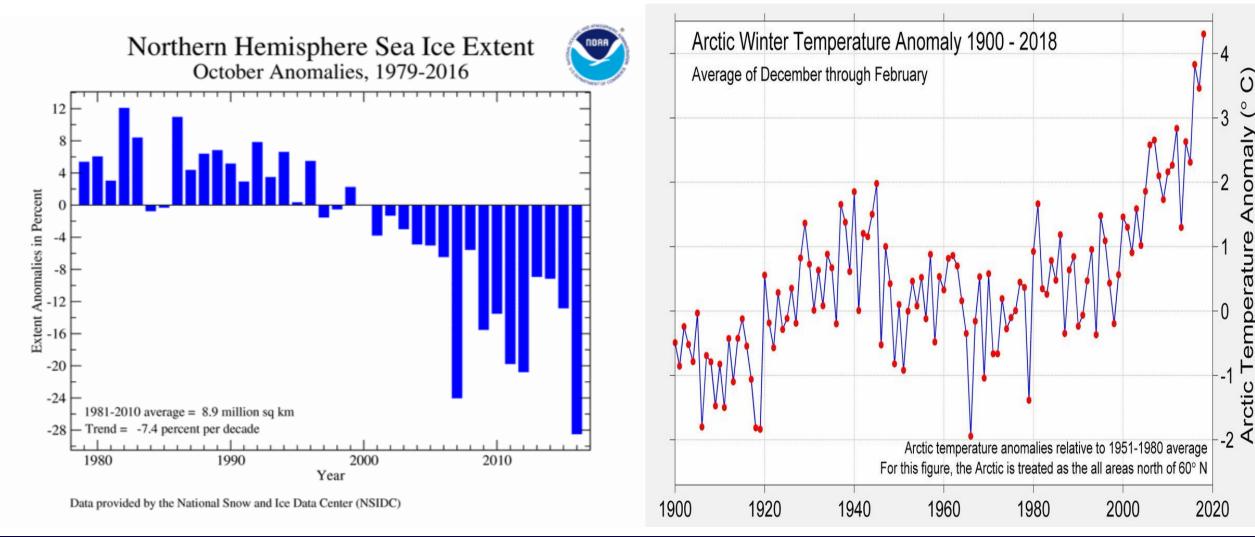




Climate Change is being Felt - More Sporadic Future Grain Supply?



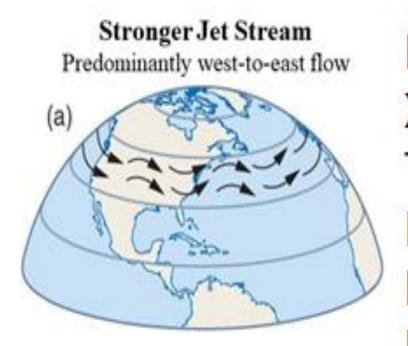
Poles Are Warming Dramatically which is Slowing the Jet Stream Allowing for "Pattern Stagnation"



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Weaker Jet Stream = Stronger Storms/ Stagnant Patterns





- · Less variability in temperatures
 - Milder seasons
- More consistent weather pattern

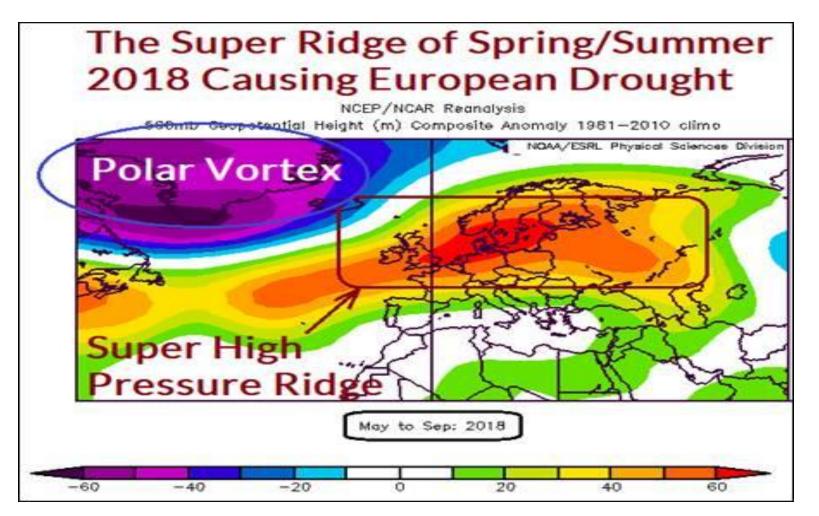
E Weaker Jet Stream Meandering flow T (b) T R E M

- More variability in temperatures
 - Cold air outbreaks in winter
 - Late-season frost events
- Less consistent weather pattern

Image: Jones & Bartlett Learning - www.jblearning.com

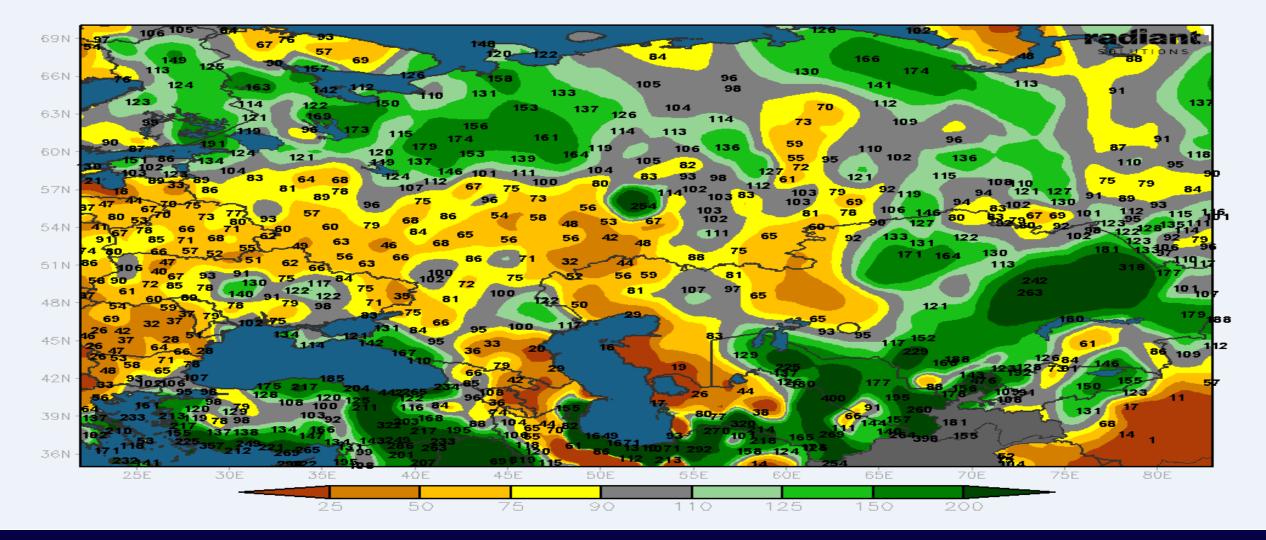
"Stuck" Weather Pattern Produced 2018 EU/ Black Sea Drought!





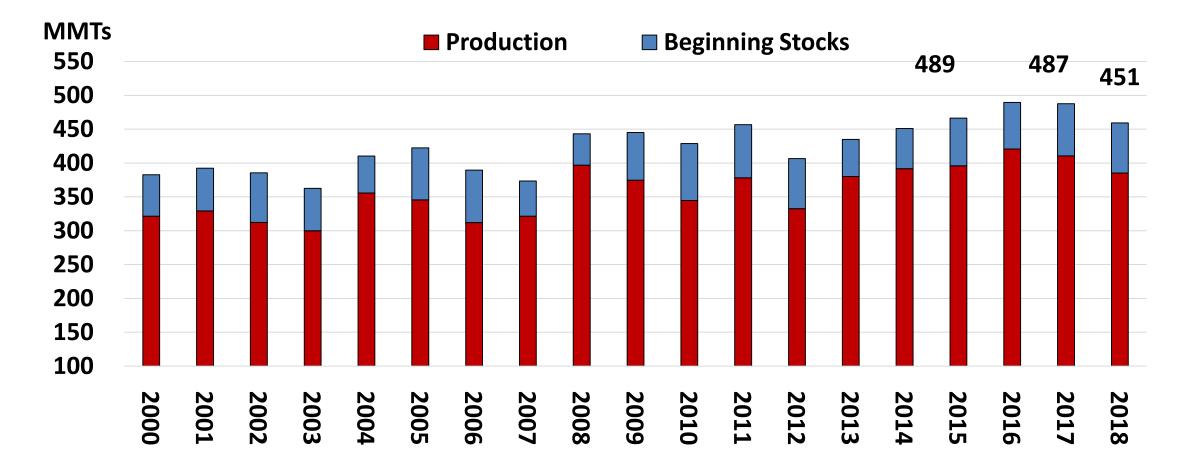


Sept 1-October 30th Dryness Extends into Central Russia!



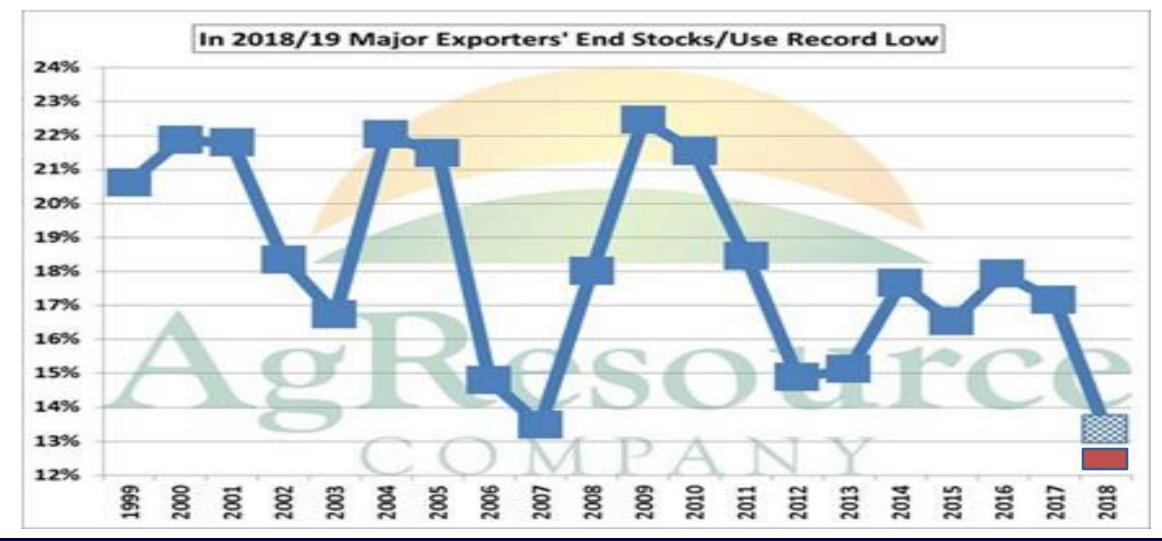


Major World Exporter Wheat Supply Down 36 MMTs in 2018

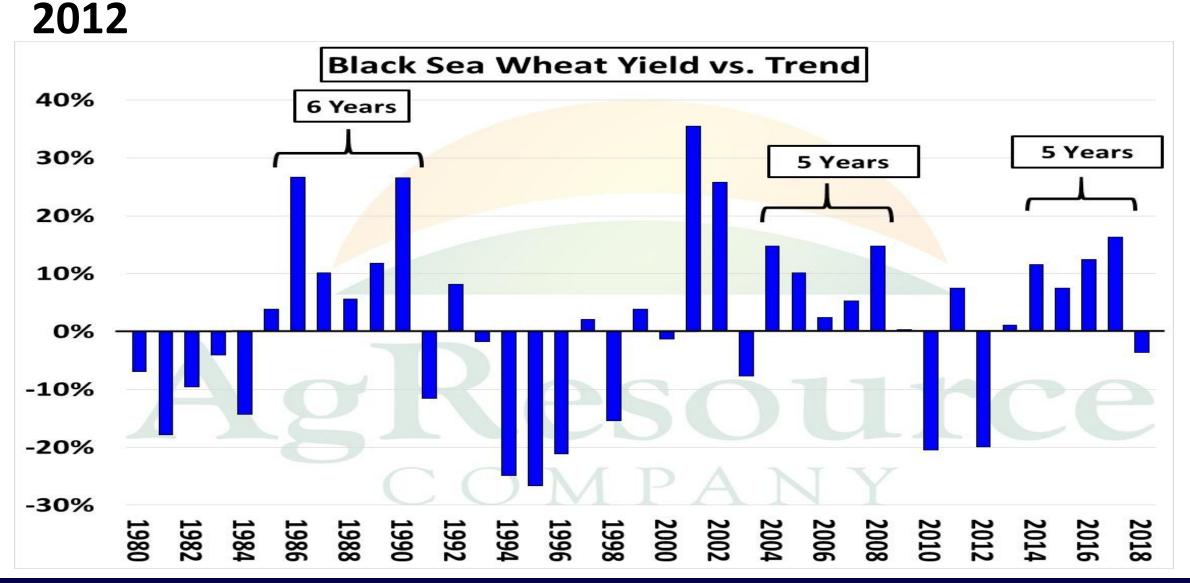




Major World Wheat Exporter Stock/Use Ratio at Record Low!

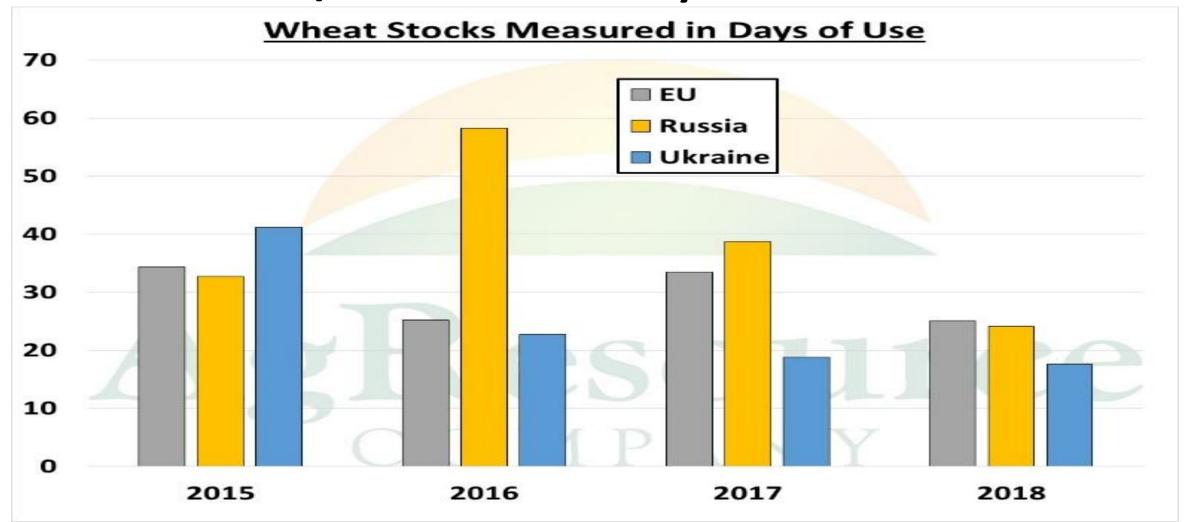


Black Sea Wheat Yield vs Trend – 1st Decline Since Agreeource

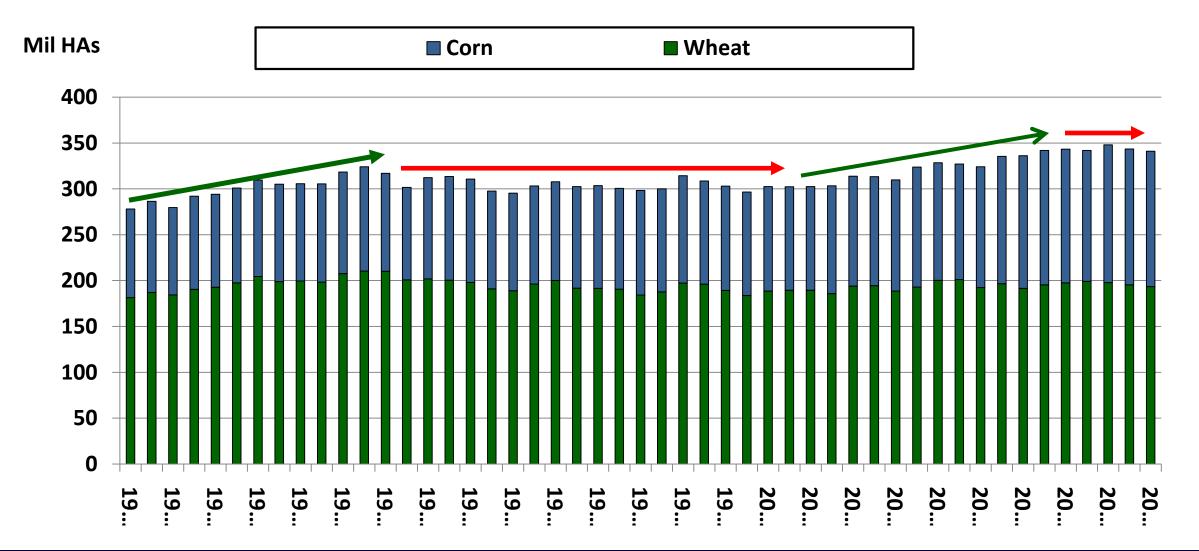


Smallest Wheat Stock/Use In Decades for The Black Sea/EU – Just 22.5 Days!





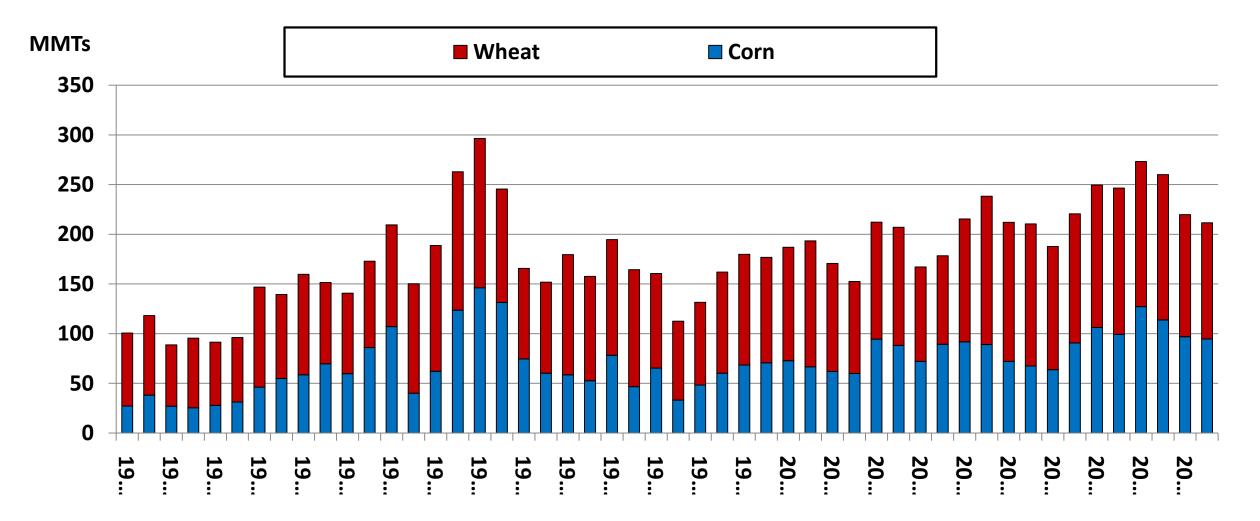
Global Area Harvested Less China; Flattening of Seeding of Major Grains



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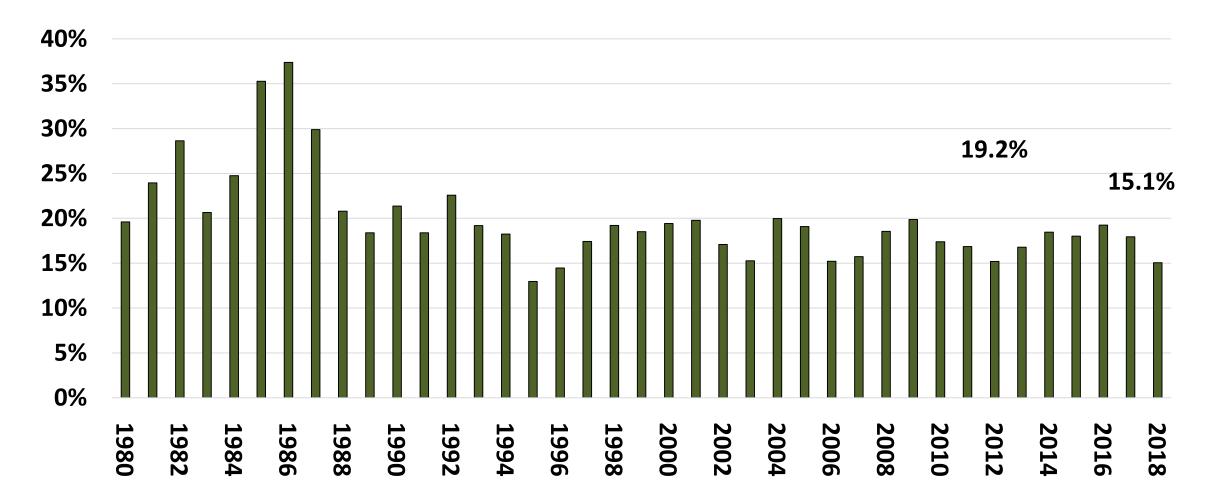
World Grain Stocks (Less China) – Lowest Corn/Wheat Stocks since 2012 at 206 MMTs



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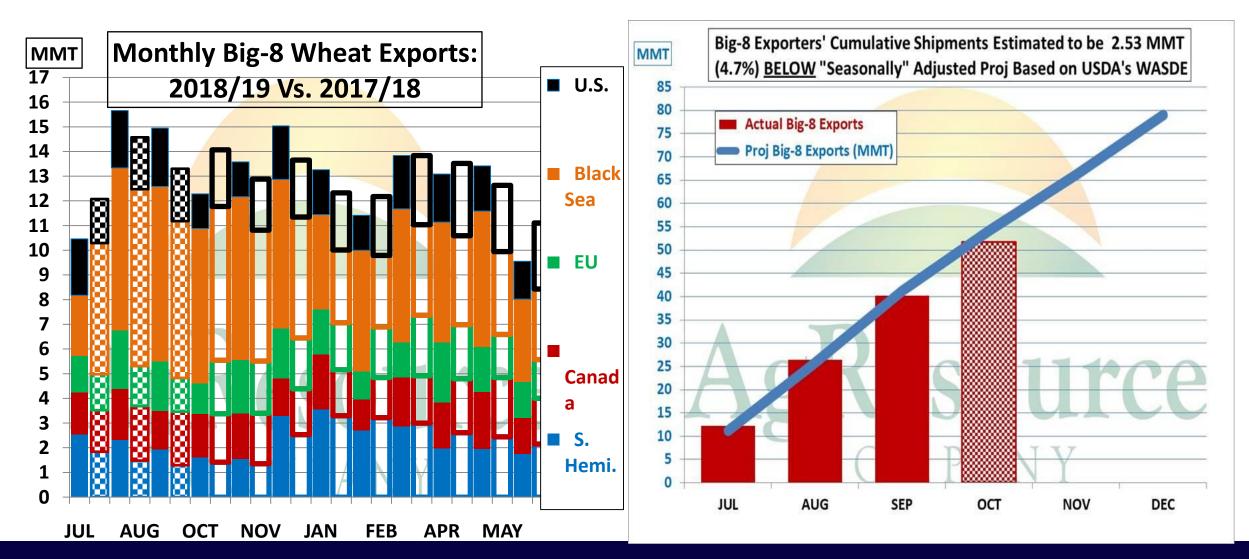


World Wheat & Corn Stock/Use Ratio (less China) Lowest since 1996



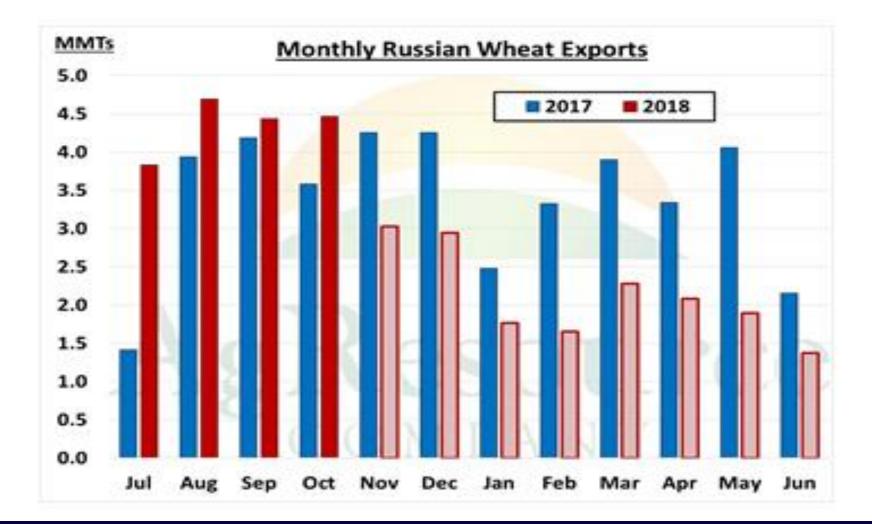
World Wheat Trade Down 4.7% in Q1 – Likely To Recover during Q2 and Q3?





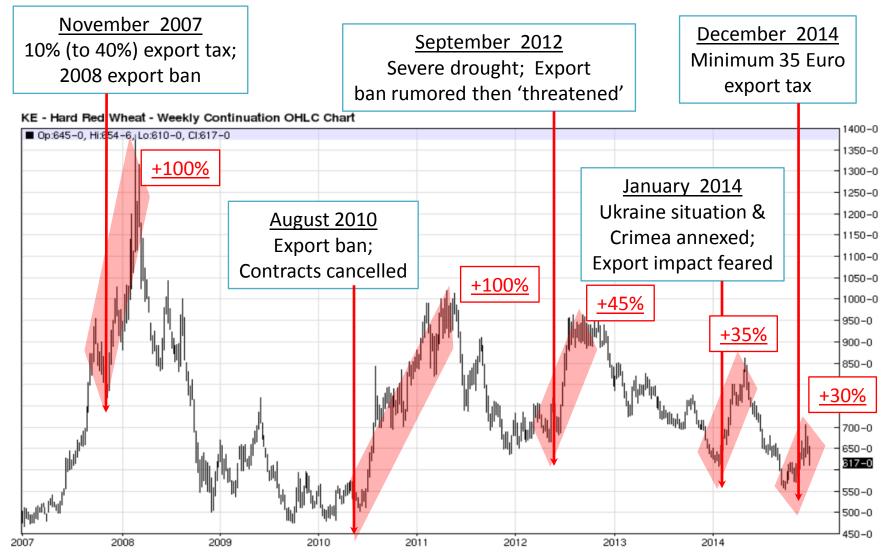


Russia Exporting Wheat at 50 MMTs Annual Pace to Beat Export Restrictions?



Russian Political Intervention in Market

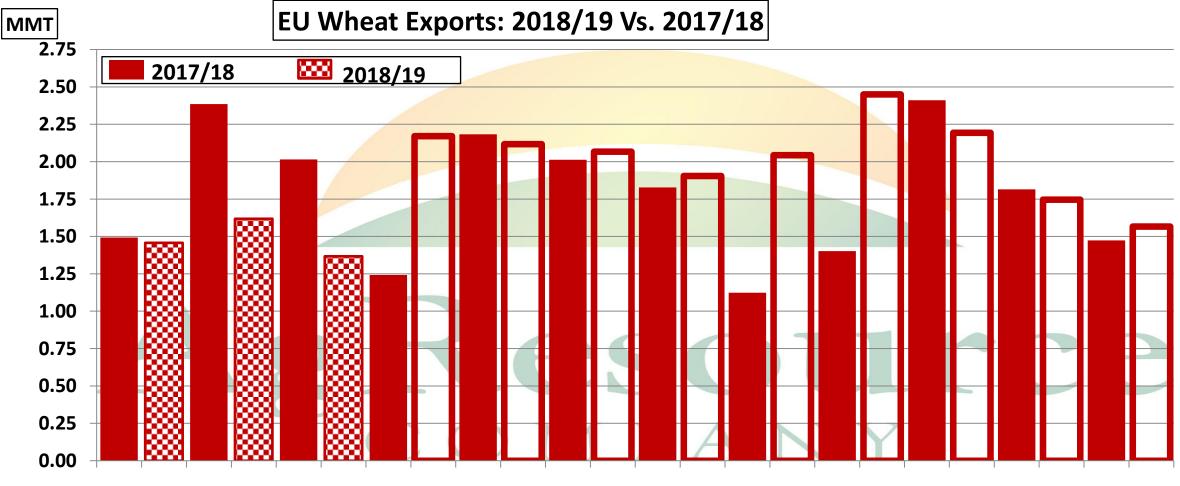




Russian Interior Wheat Prices Highest in 2 Years as Agreeource July-October Wheat Exports up 20%!



EU Wheat Exports Will Not Reach USDA Forecast of 23 MMTs! Maybe 17-18 MMTs?



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JUL JUL AUG AUG SEP SEP OCT OCT NOV NOV DEC DEC JAN JAN FEB FEB MARMAR APR APR MAY MAY JUN JUN

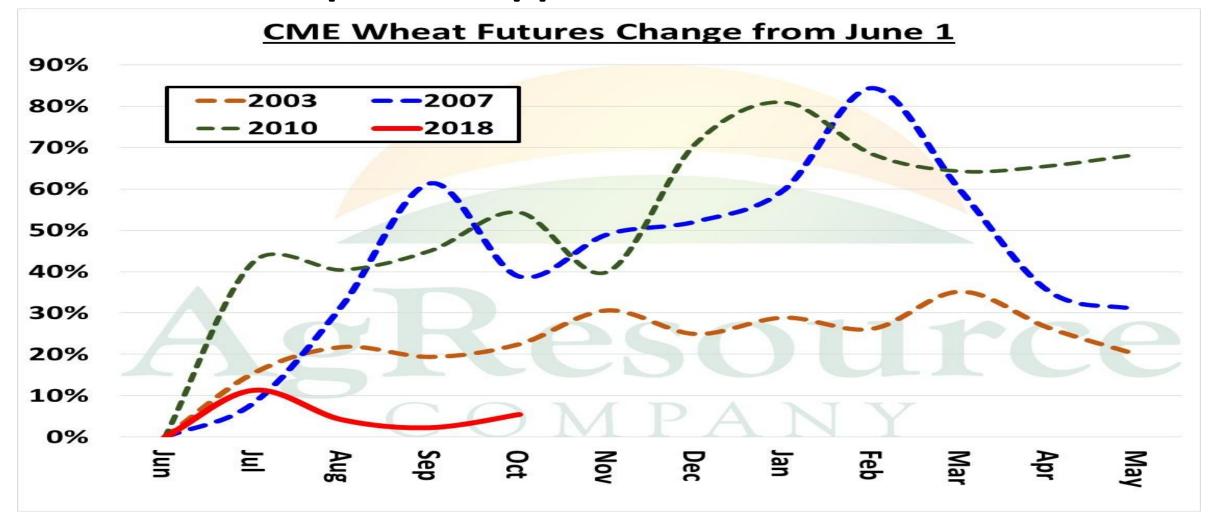


The US Cannot Export 42 MMTs of Wheat – Most in the Last Half of the Crop Year!

Major World W	heat Exporter Es	stimates	
	2017/18	USDA 2018/19	ARC 2018/19
Australia	15	13	10
Argentina	12	14.2	14
Canada	22.1	24	22.5
EU	23.5	23	18
Russia	42	35	31
Ukraine	17.5	16.5	16.5
Sub Total	132.1	125.7	112
US	24.5	27.9	42
7 Majors	156.6	155.4	154

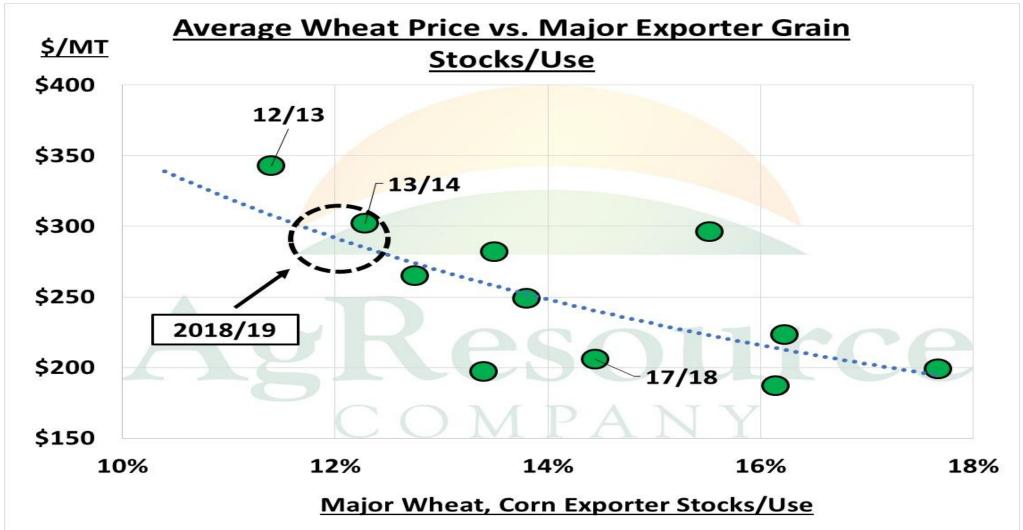


Looking Back at Other Years of Tight World Exporter Supplies of Wheat



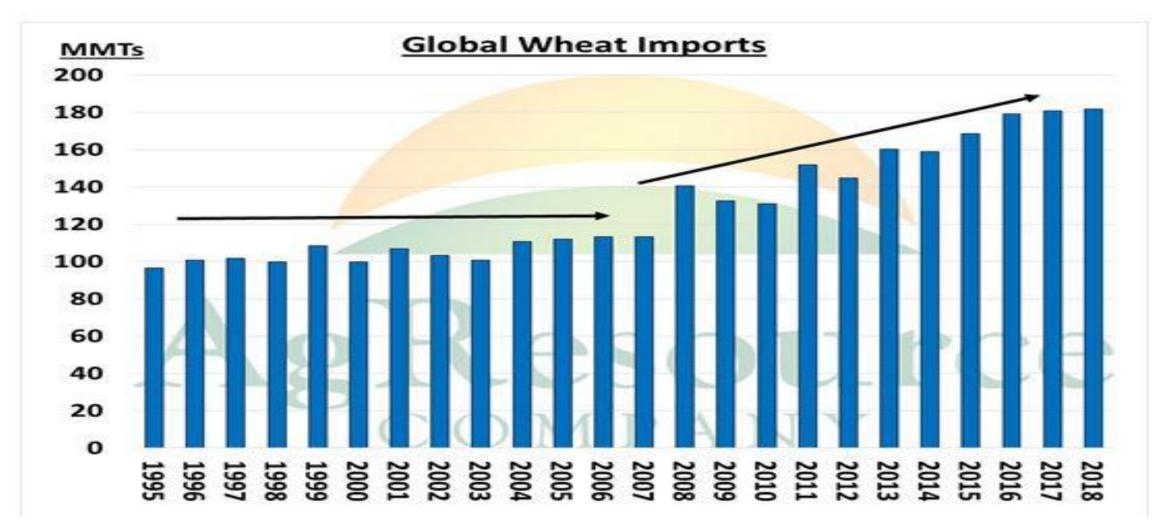


Q1 Price highs; Russia, US, French, German 12.5% fob; \$265-290/MT





Nearly 90 MMTs Gain in Global Wheat Imports in Past Decade – Need for Future Large Wheat Crops



World Wheat Exporter Balance Sheet



Mil Hectares, MTs

	2016/17	2017/18	2018/19	AgResource 2019/20
Beg. Stocks	68.7	76.8	76.7	56.4
Harvested	122.3	118.9	117.2	121.1
Yield	3.44	3.45	3.26	3.42
Production	420.6	410.6	382.6	414.2
Imports	18.5	19.0	19.0	19.2
Total Supply	505.8	506.3	478.3	489.9
Feed	97.9	99.1	93.0	95.5
Food/Seed/Indus.	164.1	165.4	165.0	165.8
Exports	167.1	165.1	163.9	168.1
Total Demand	429.0	429.6	421.9	429.4
End Stocks	76.8	76.7	56.4	60.5



It's not enough to know the news. You need to trust the analysis.

Thank You