

Wheat in a World Awash in Grain



Daniel W Basse
President AgResource Company

Ag Market Drivers for 2015?

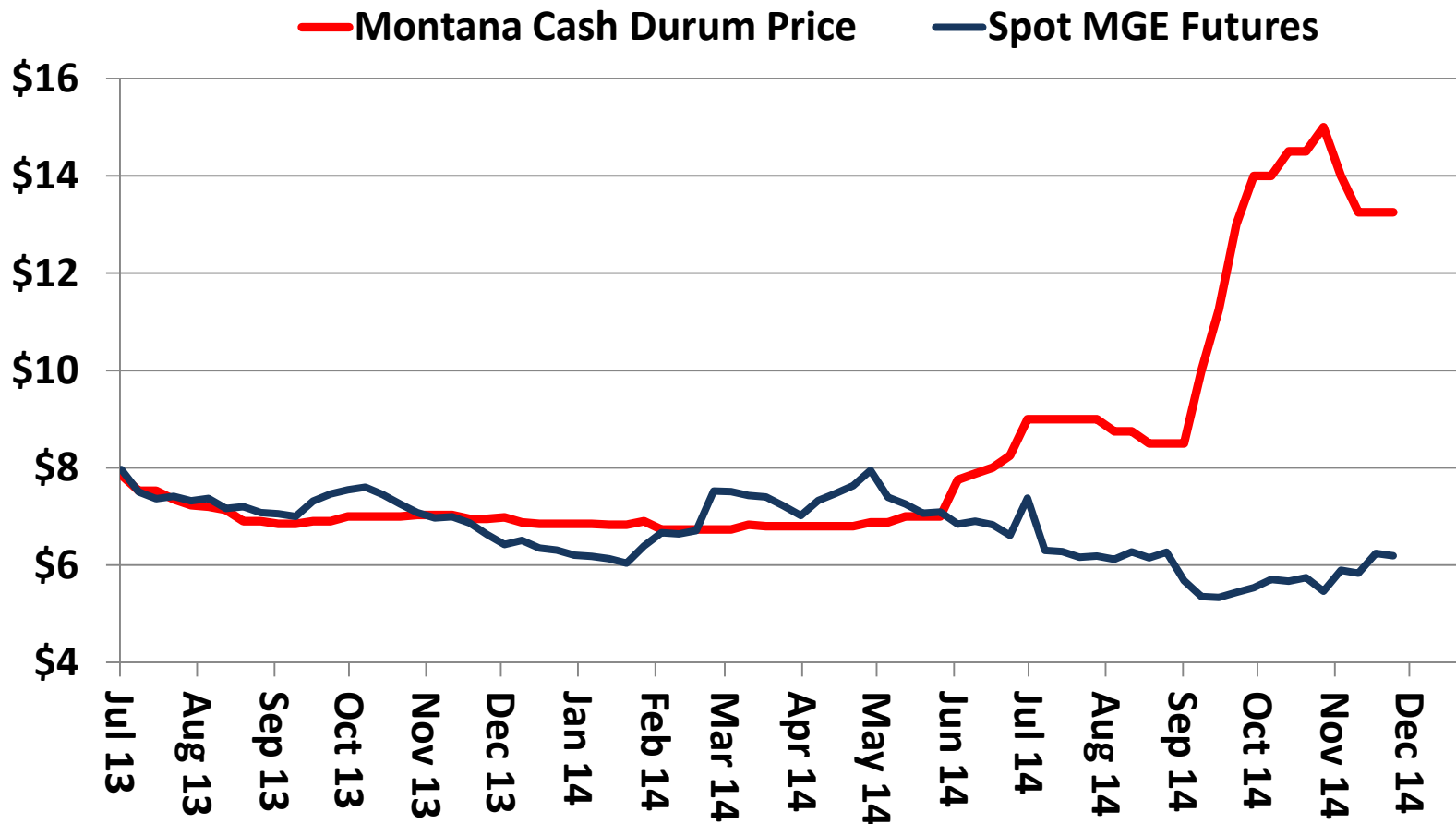
- **World Food inflation to rise 3.7% in 2014 (vs 2.9% in 2013) driven primarily by gains in livestock/dairy prices. Total 2014 world meat production down .8%. Beef prices to gain 7.4%, pork 8.5% and poultry 5.7%. 2014 world food CPI to gain – even with lower grain prices. 2014 – the year of the species!**
- **North America will be energy self sufficient by 2020. Fracking will occur around the world by 2016. How is fracking the impacting the North America ag markets?**
- **World Farmland prices have peaked and could correct 5-35% depending on how fast interest rates rise and China's future import demand of soy/grain.**
- **Bio Fuel Boom is mature..... rising caloric intake now has to kick in for grain bull markets. In the past 2 years, world grain yields have risen faster than caloric intake demand!**
- **China has become a more important driver of world ag demand. How will China's new farm policies impact world grain trade? And what impact will China's slowing economic growth have on its commodity trade?**
- **World Coarse Grain demand increased 99 MMTs during the 2013/14 crop year. Was the demand increase pipeline restocking or actual new feed/processing use? Our bet is that it was pipeline restocking as world millers and end users are more patient buyers during the remainder of 2014 and first half of 2015.**

World Market Drivers for 2014?

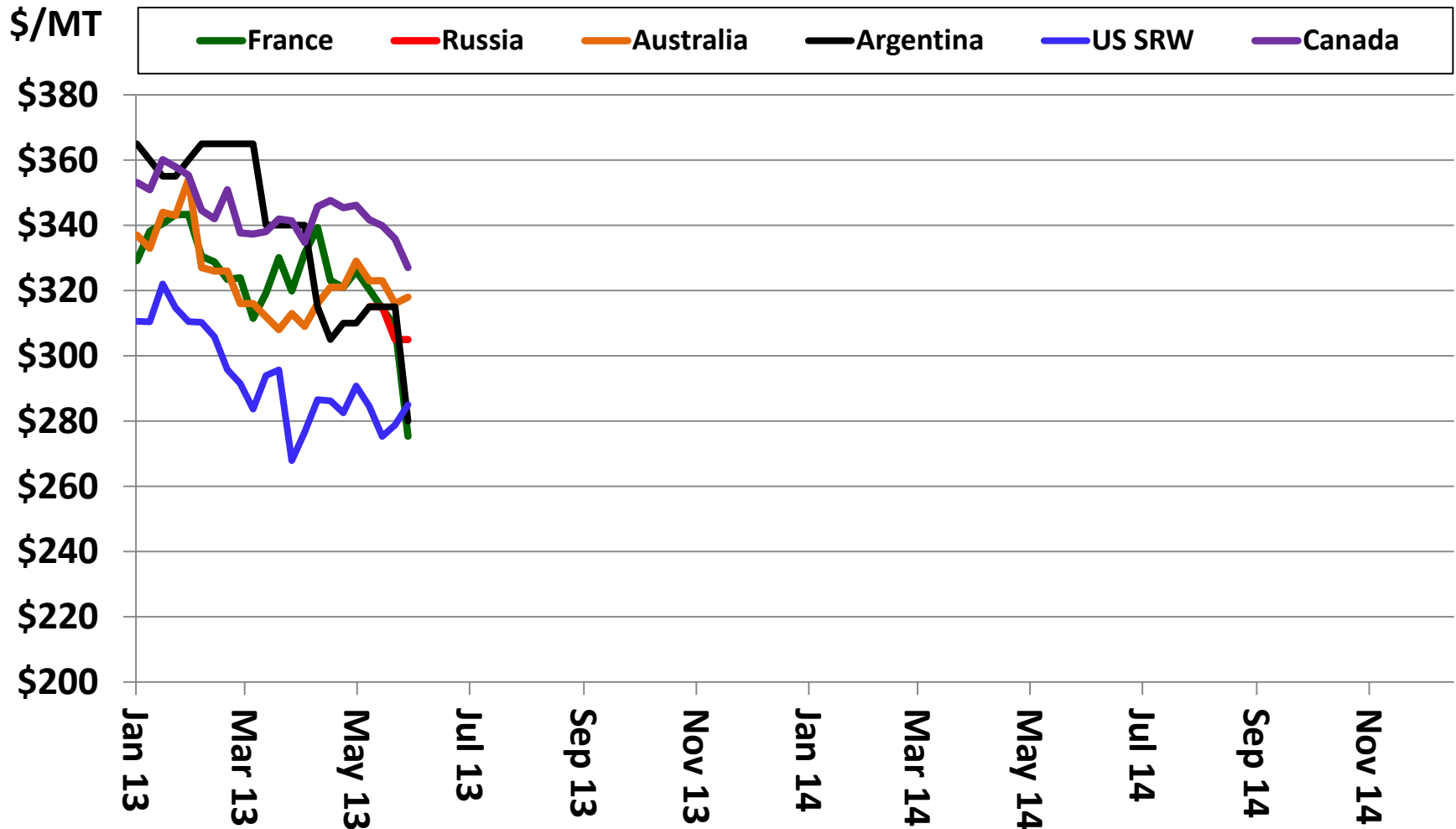
- 2014/15 World corn, soybean and wheat crops are all record large – this is the 1st time that this has occurred since 1960!
- World agriculture is in transition phase – away from the bullish 2006-2013 bio fuel boom to something more akin to 1990-2005. We'll have to relearn the old ways - significant rallies do not occur without dire weather – or China returning as a sizeable world grain importer! World Government ag policy becomes more important to world farmers in the years ahead as supplies /stocks grow.
- The Bullish Ag/Commodity Super Cycle has ended!



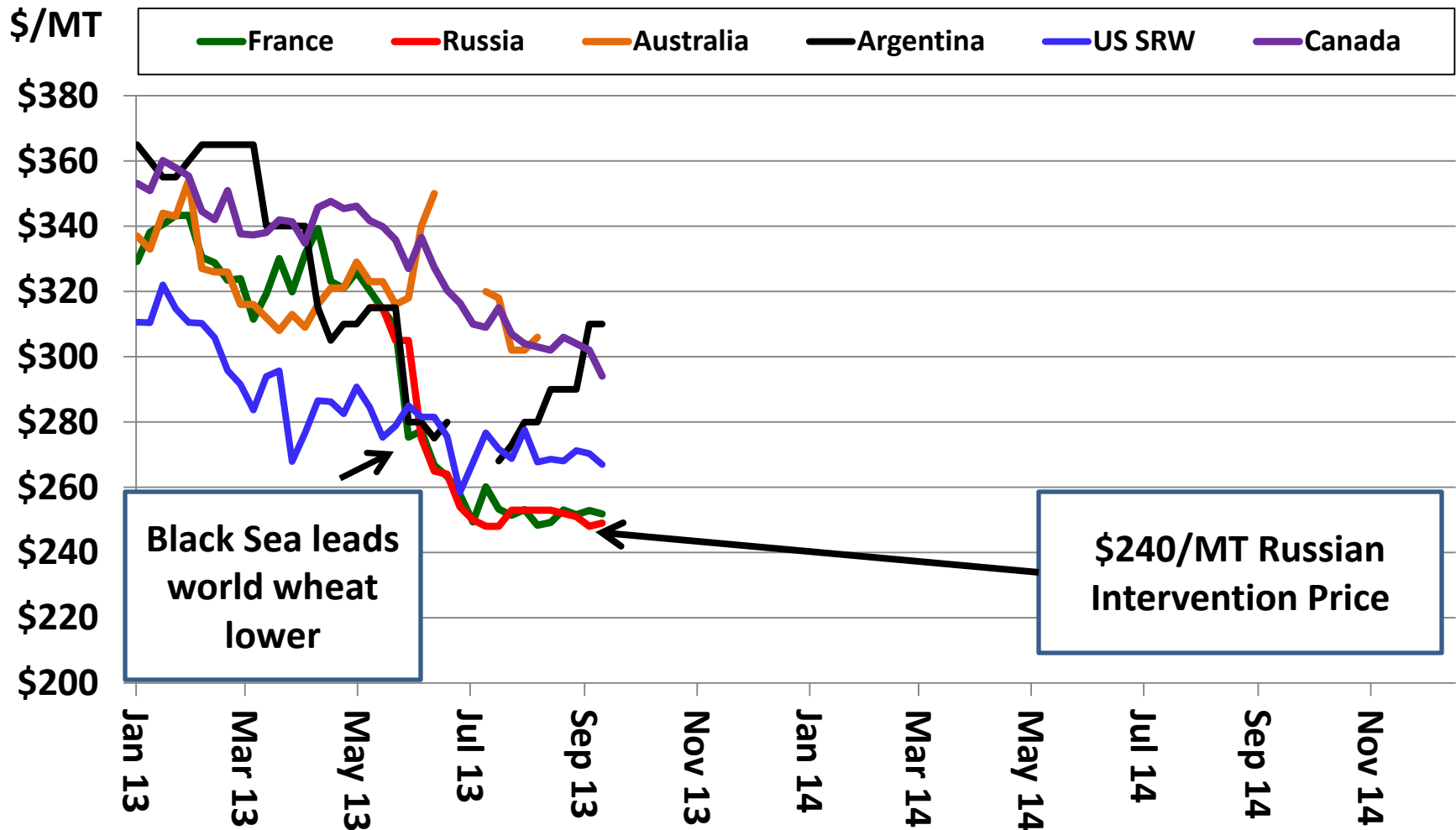
Northern Plains Durum Wheat Price



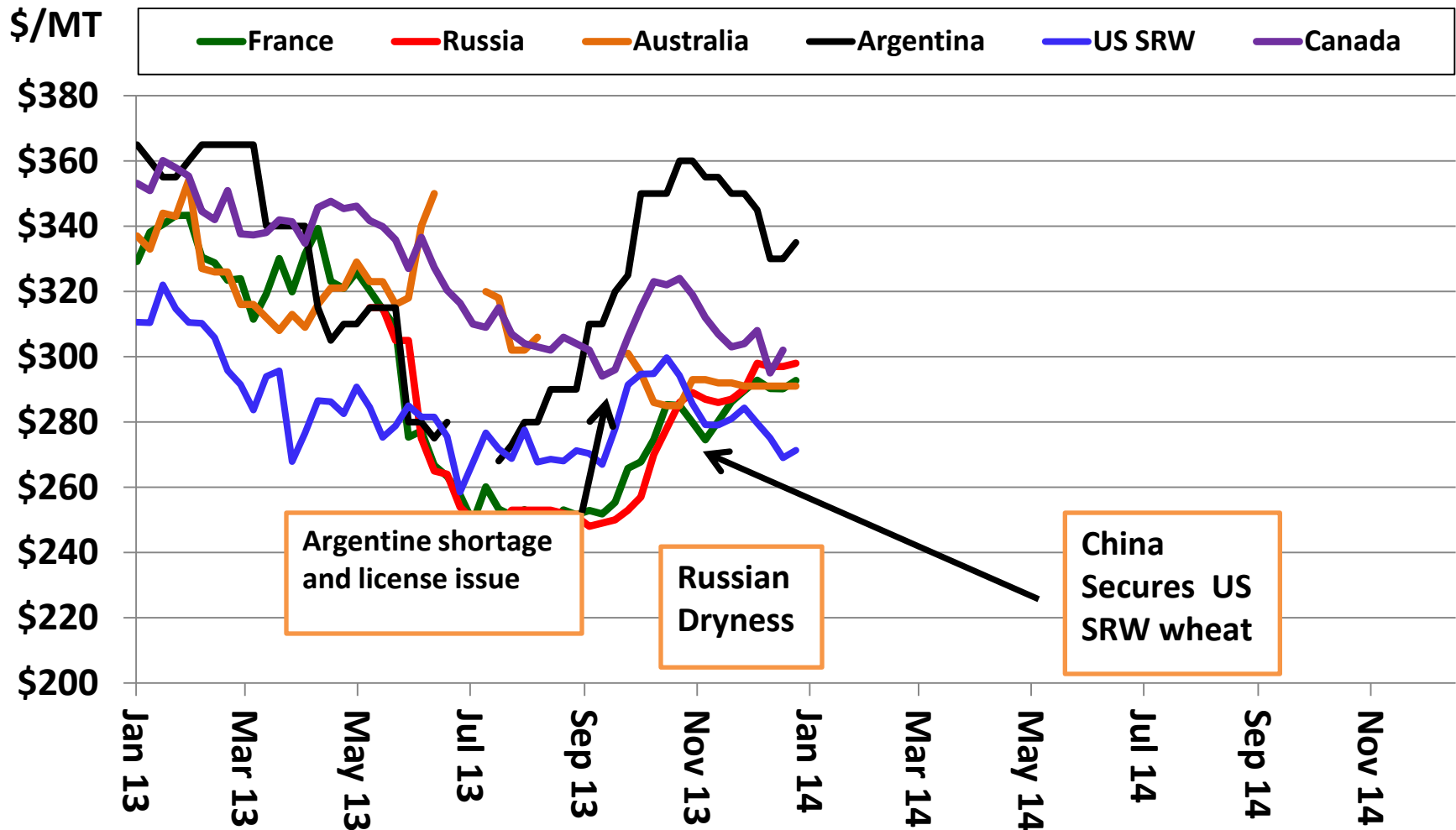
FOB World Wheat Prices



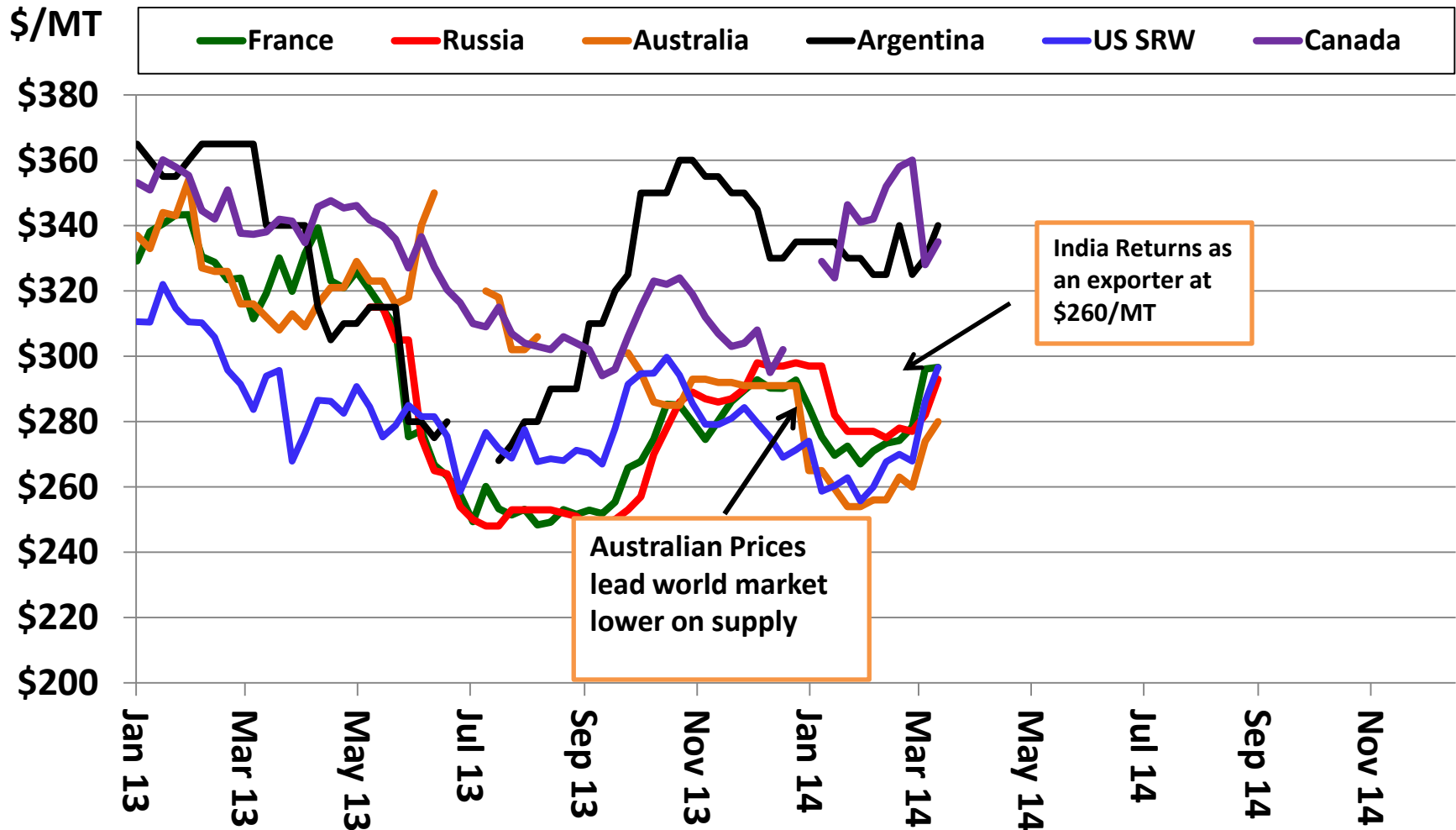
FOB World Wheat Prices



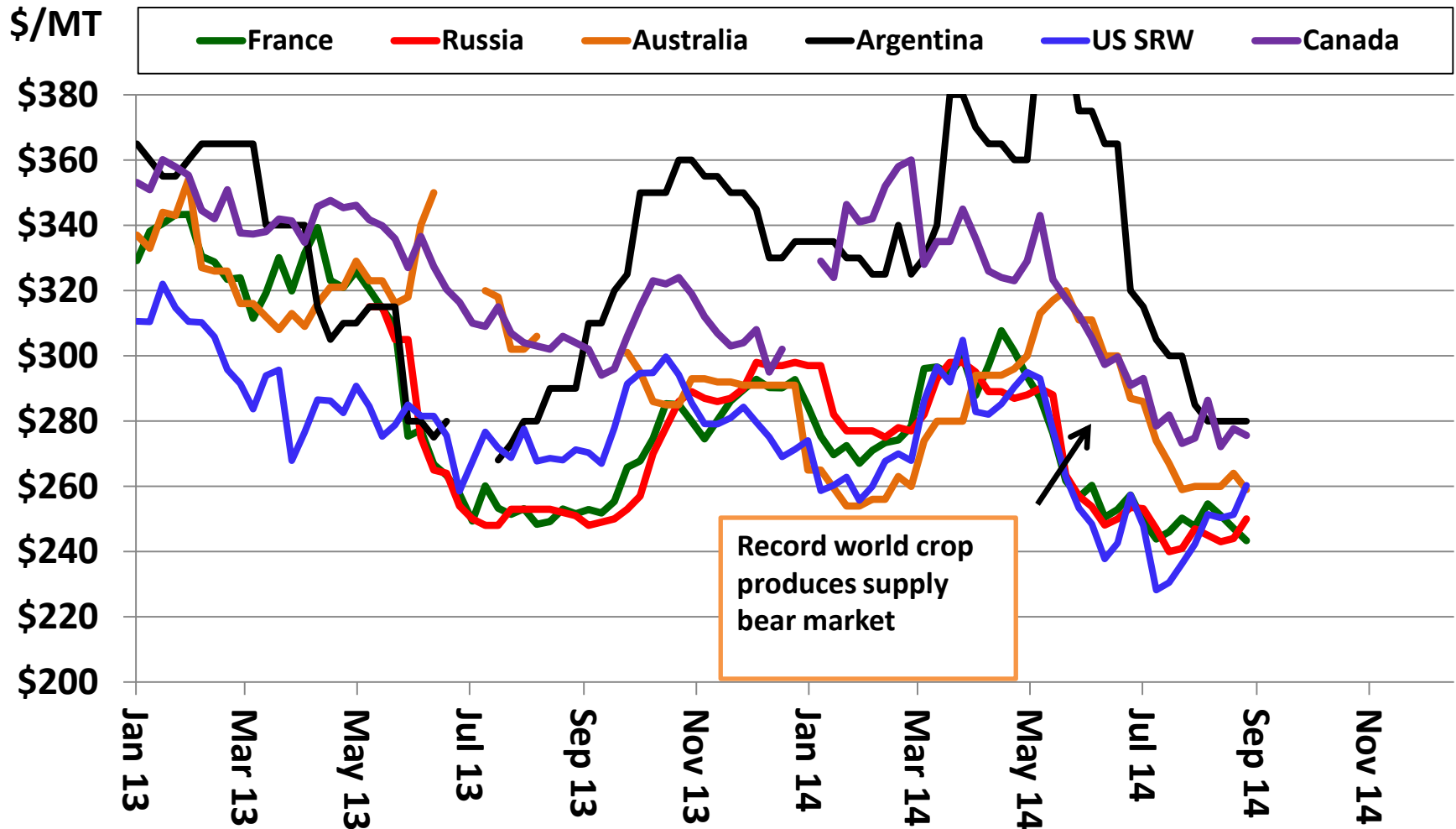
FOB World Wheat Prices



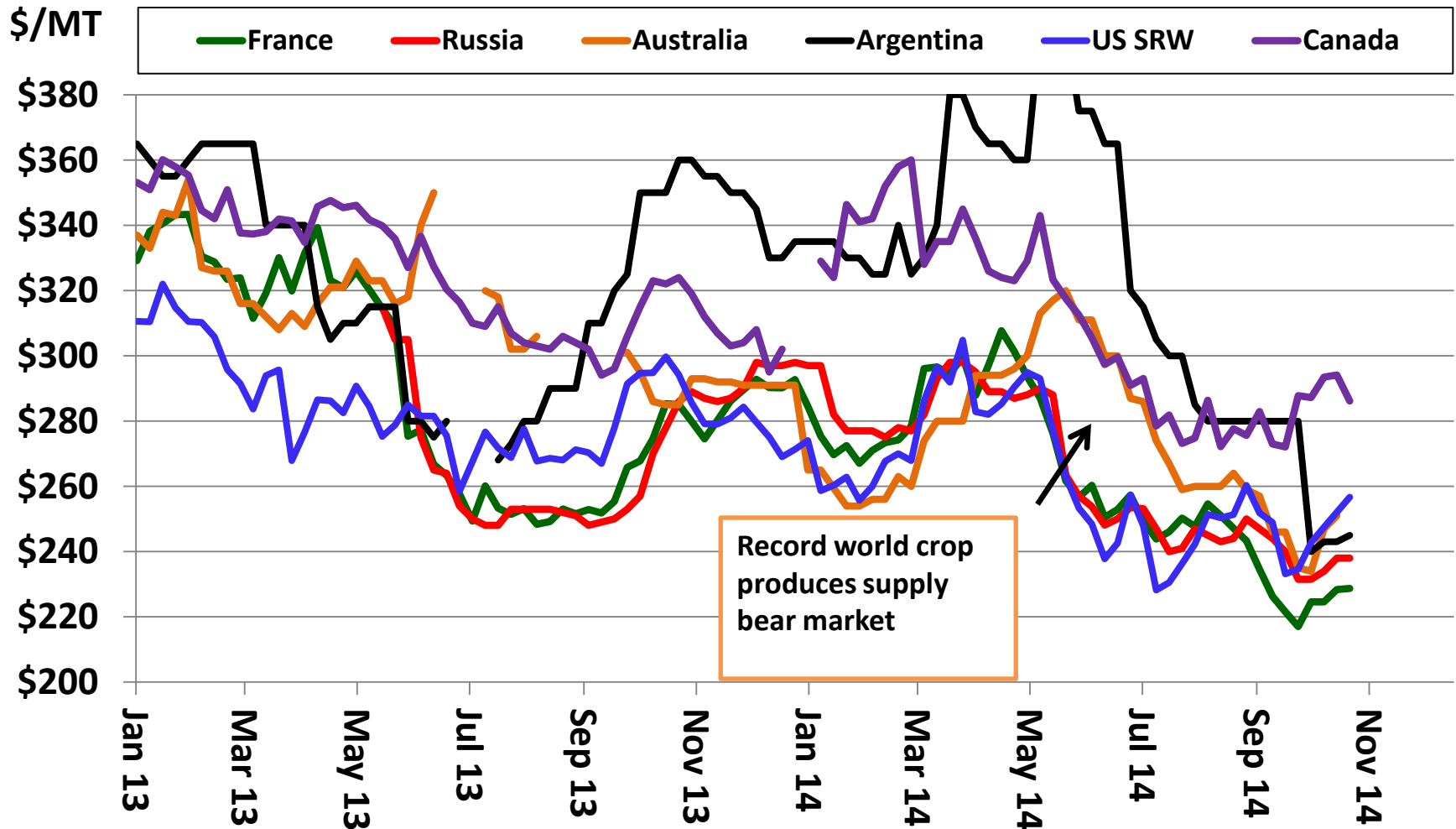
FOB World Wheat Prices



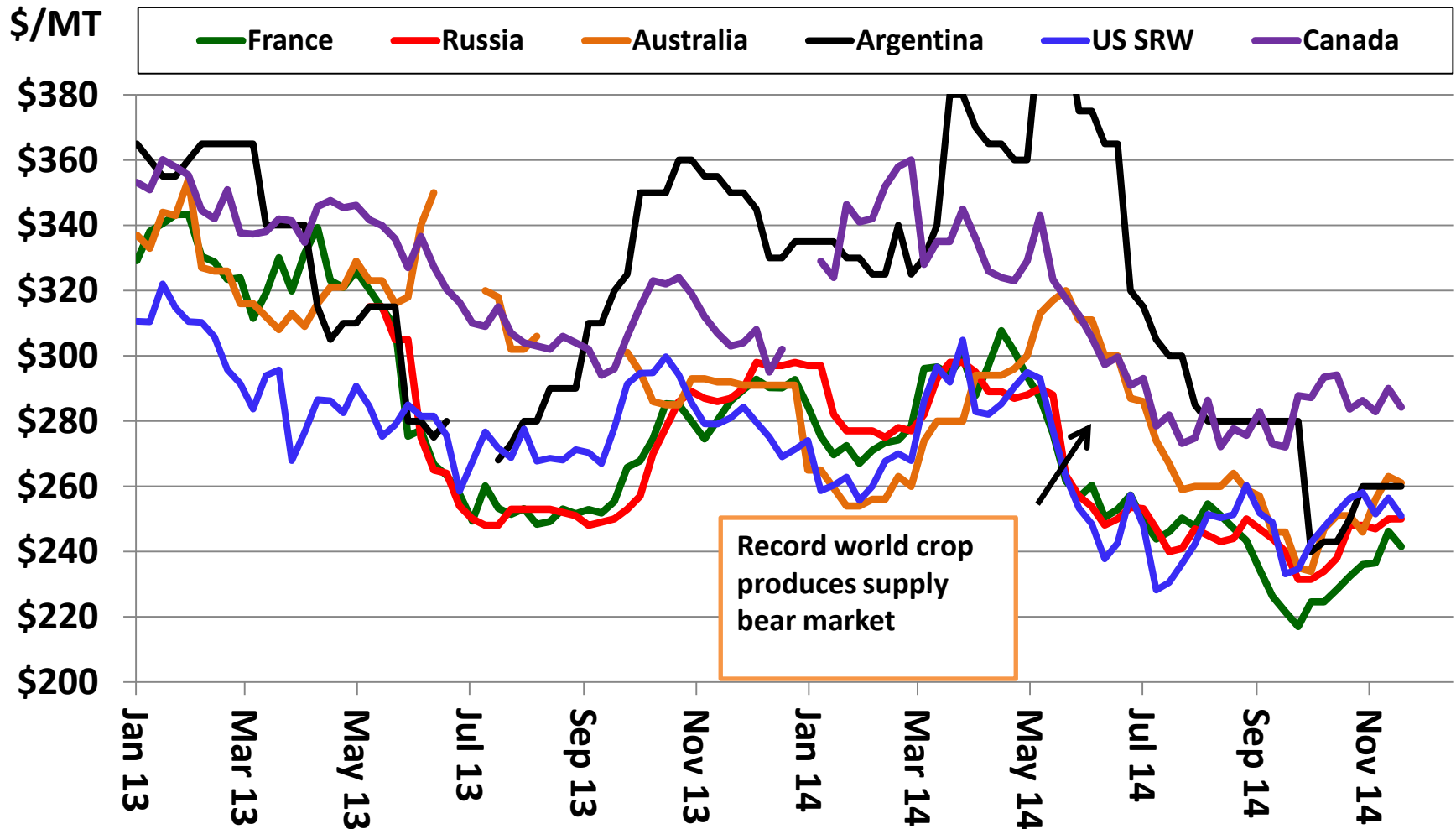
FOB World Wheat Prices



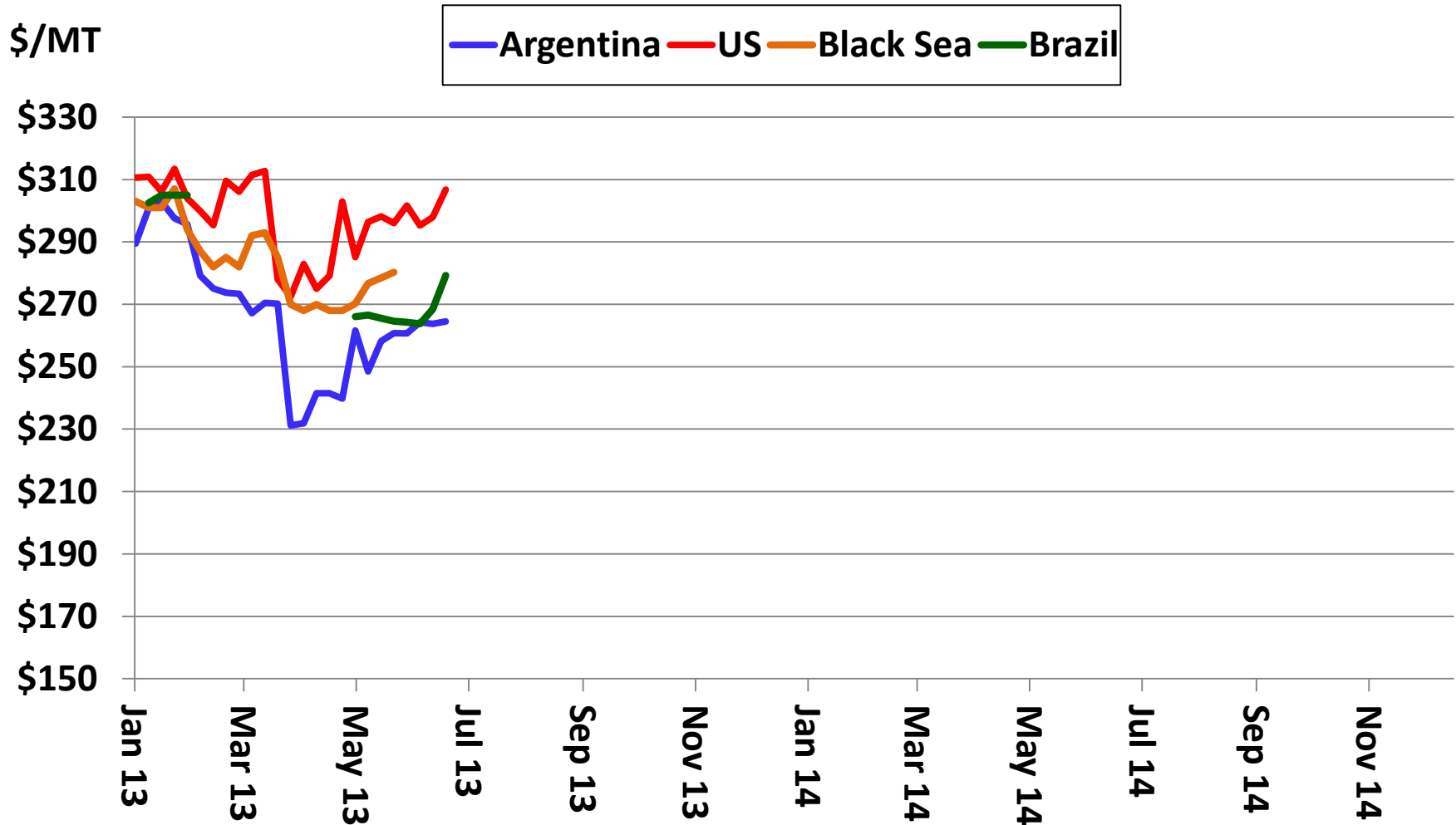
FOB World Wheat Prices



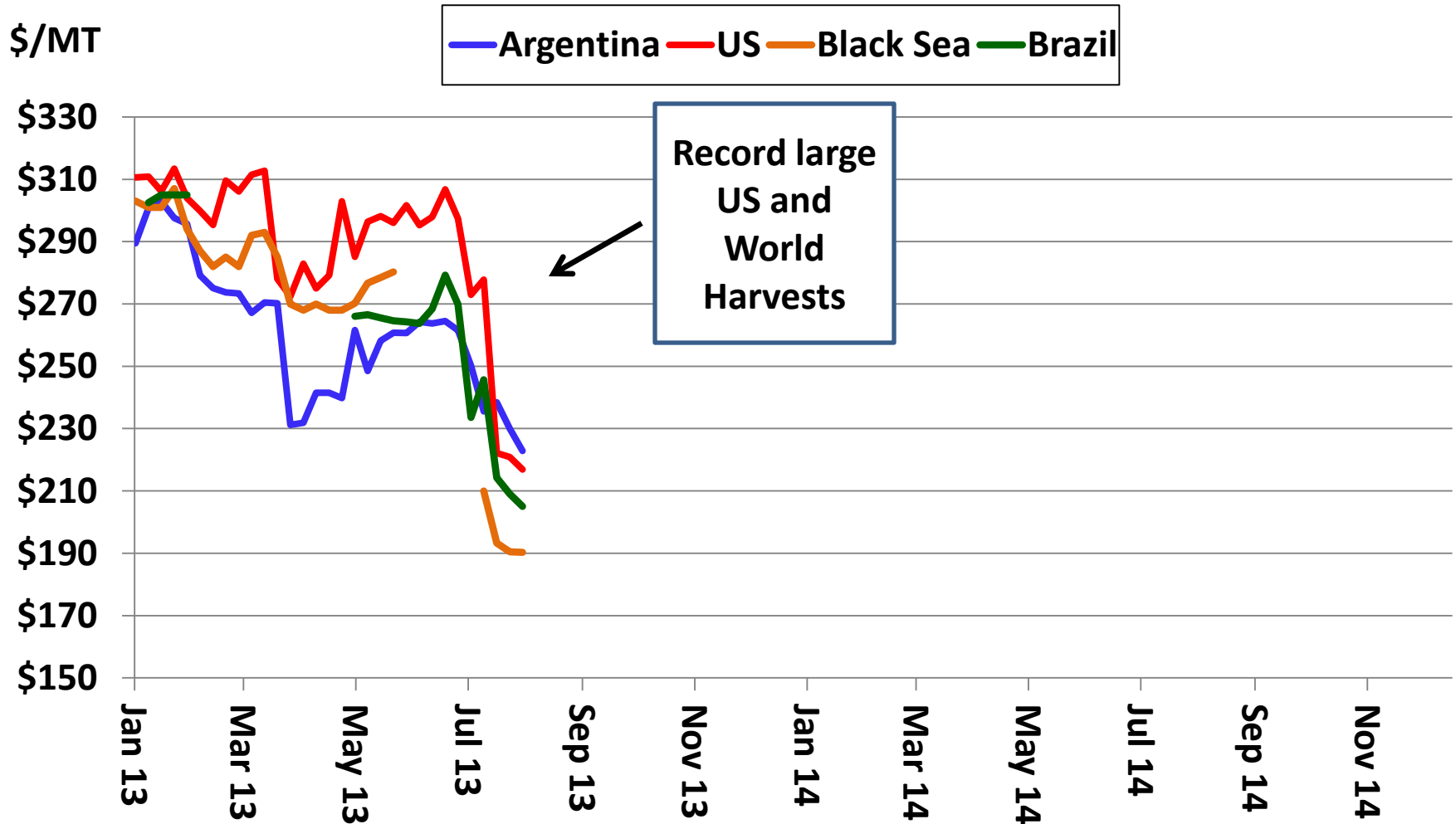
FOB World Wheat Prices



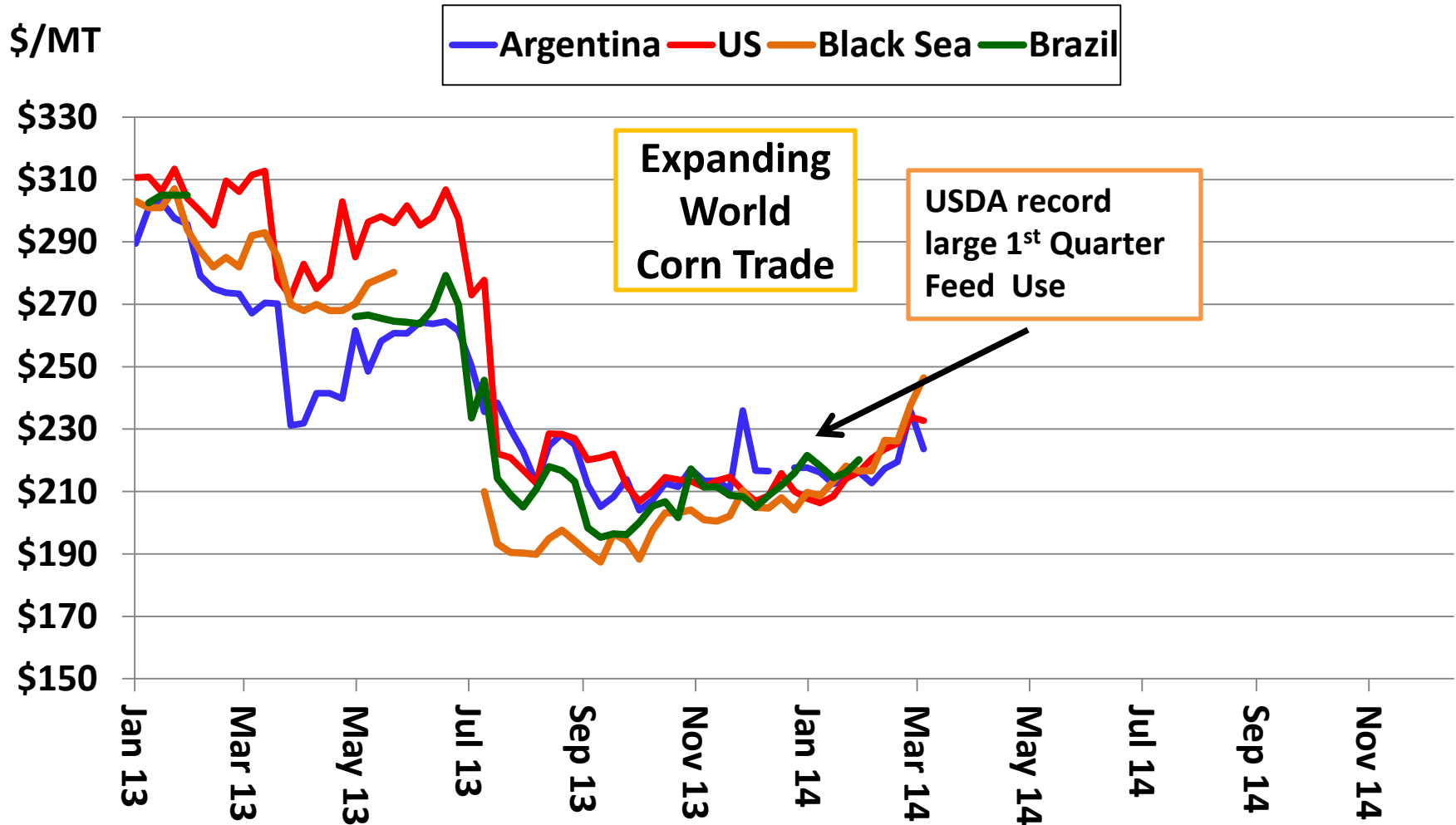
FOB World Corn Prices



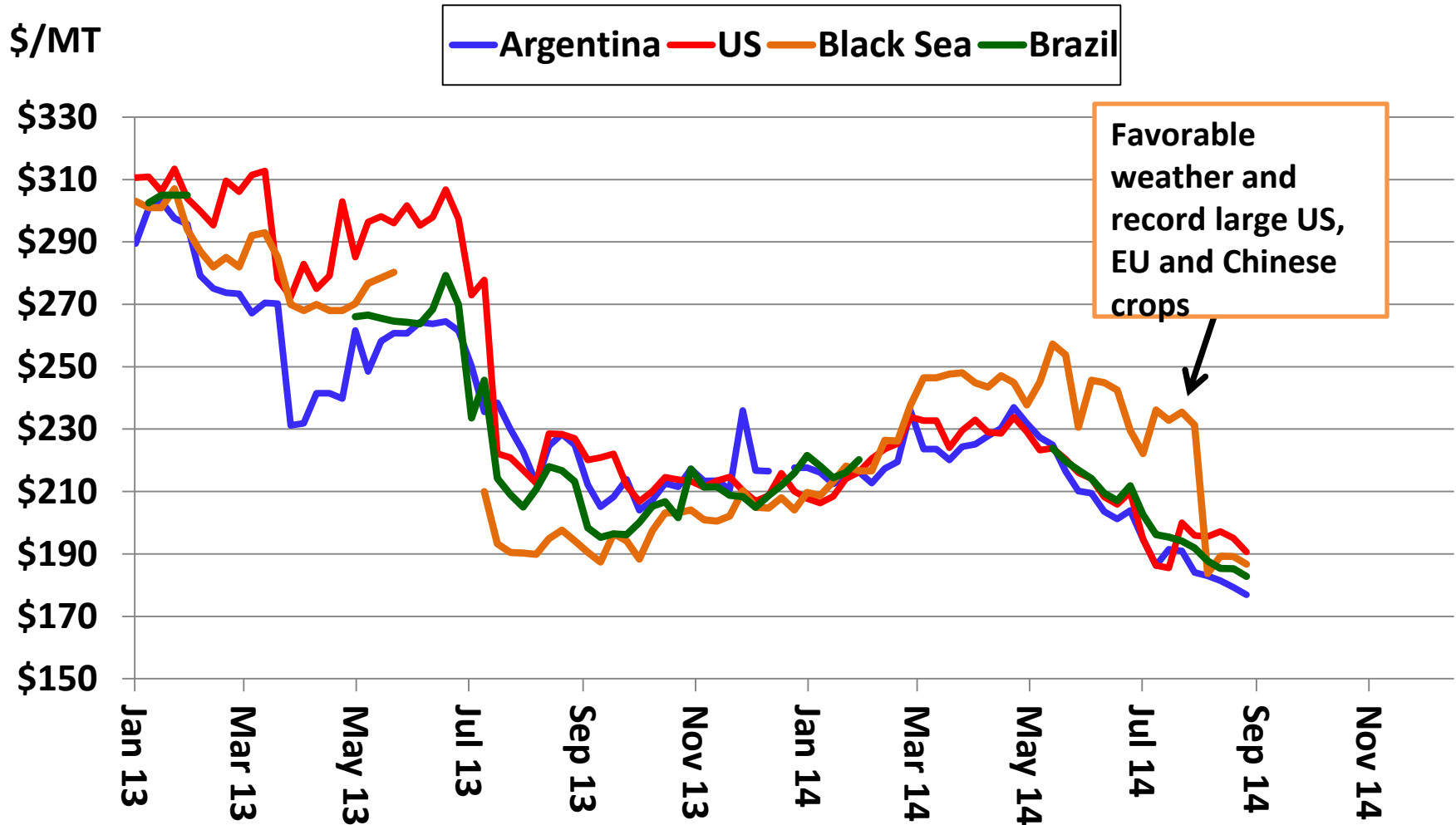
FOB World Corn Prices



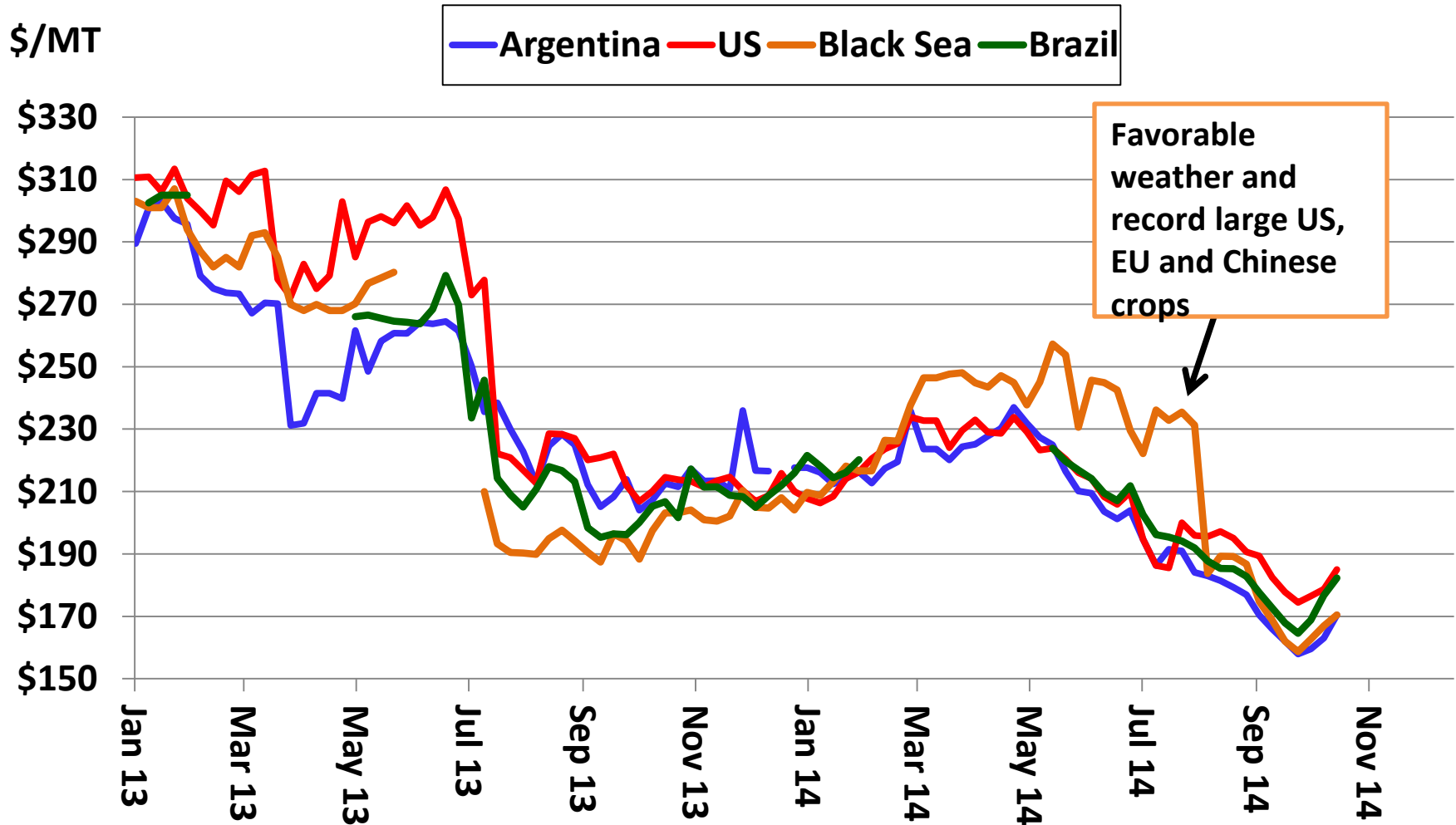
FOB World Corn Prices



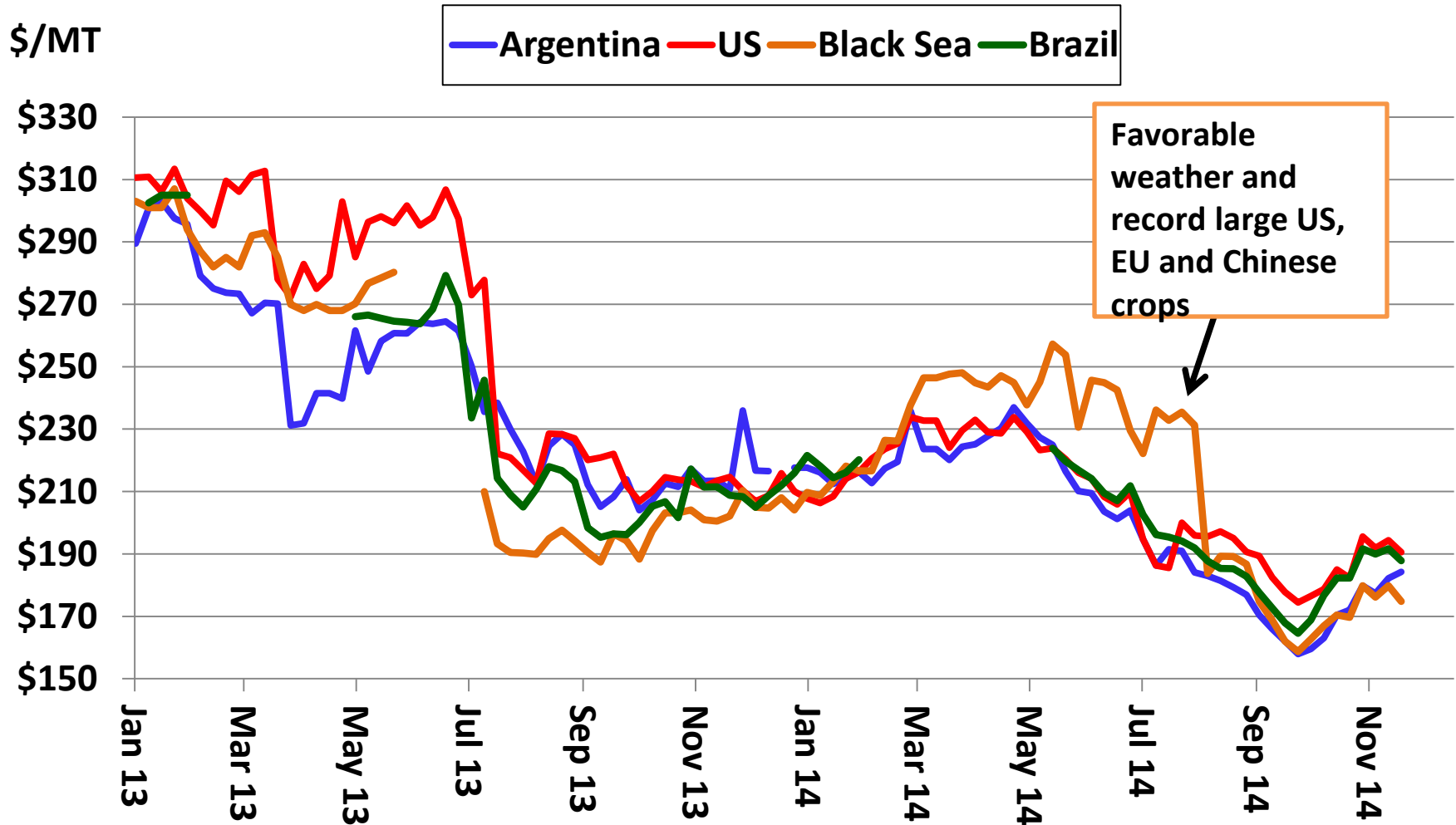
FOB World Corn Prices



FOB World Corn Prices



FOB World Corn Prices



The Ukraine Civil War and Fund Demand bumped the grains higher into spring planting



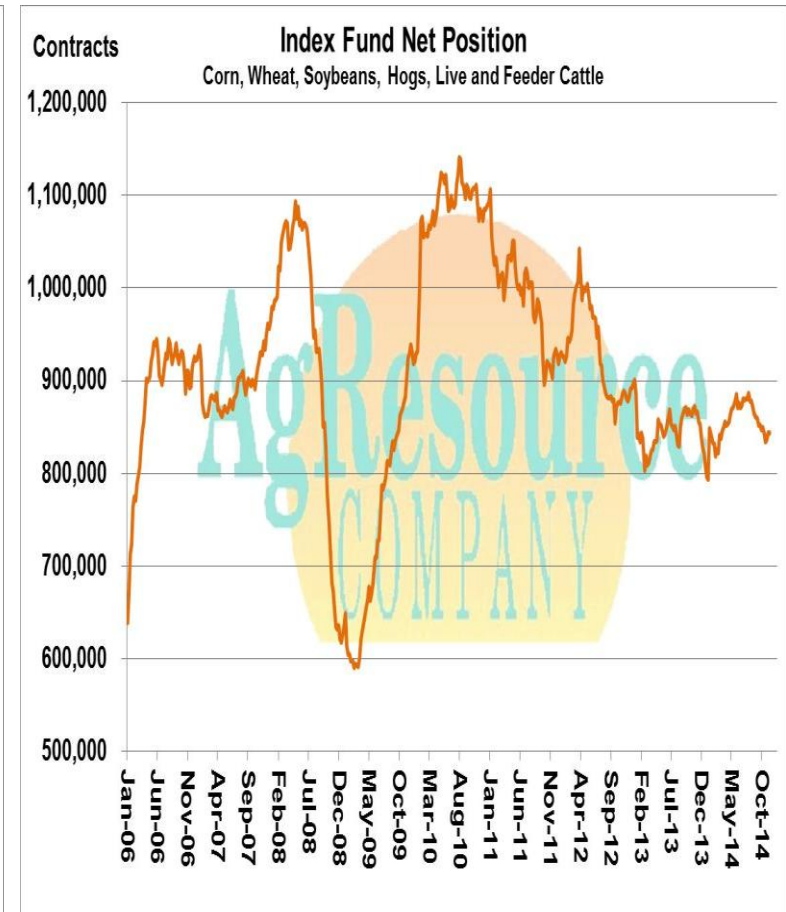
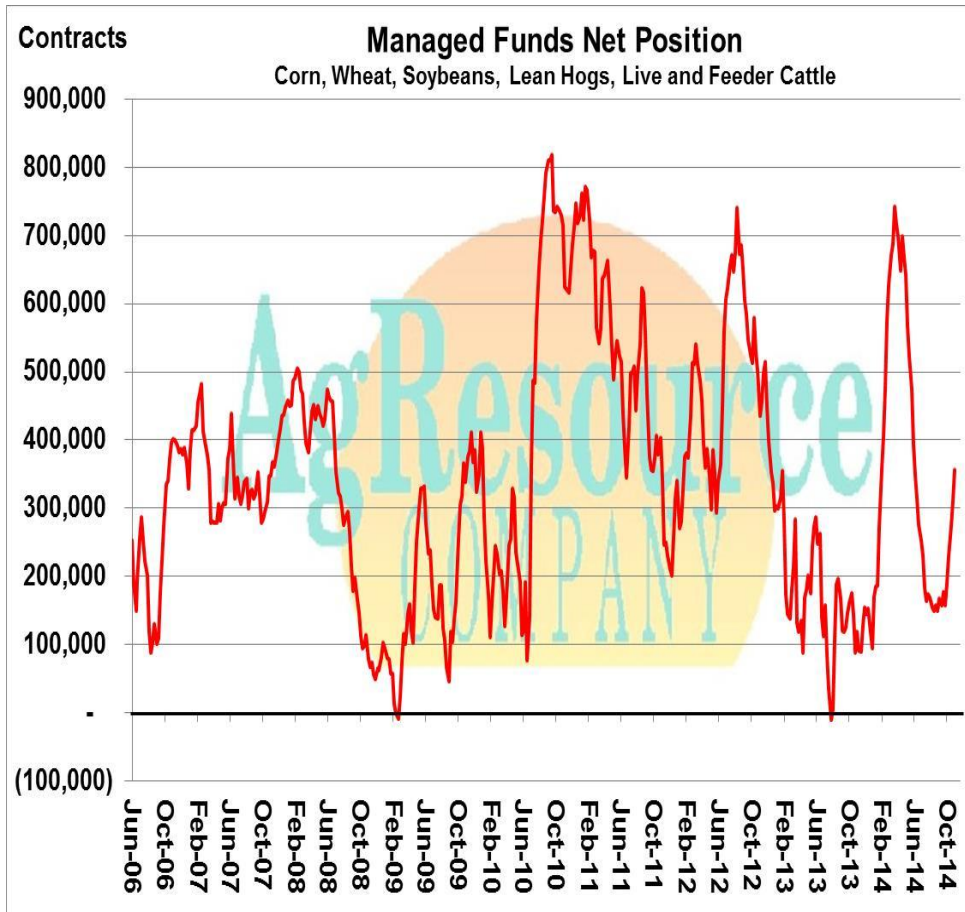
Corn Weekly Prices



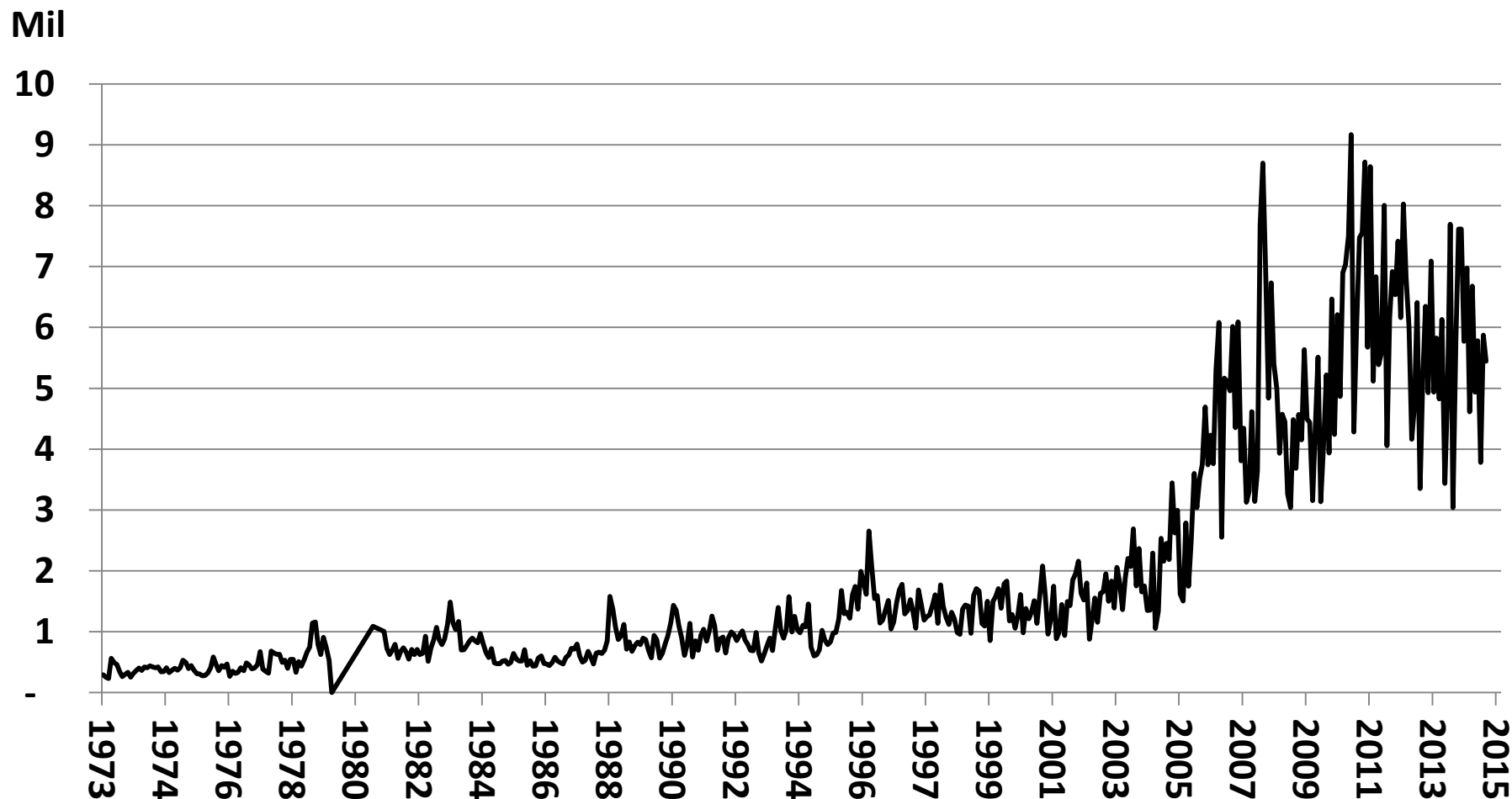
Wheat (CBOT) Weekly Prices



Fund Managers Roil and get Rolled in the Ag Markets!



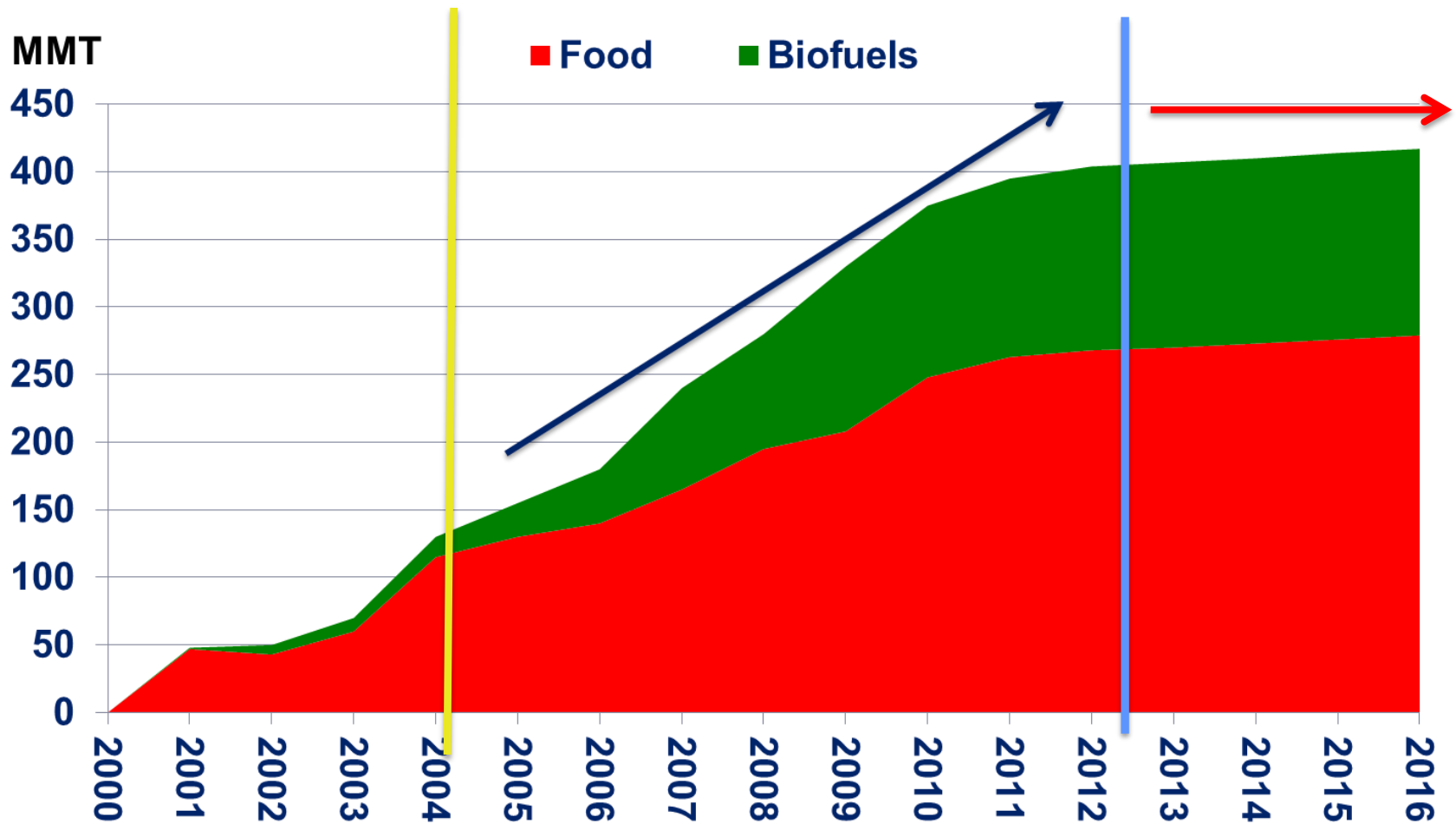
CBOT Monthly Corn Volume and Week-to-Week Volatility in Retreat



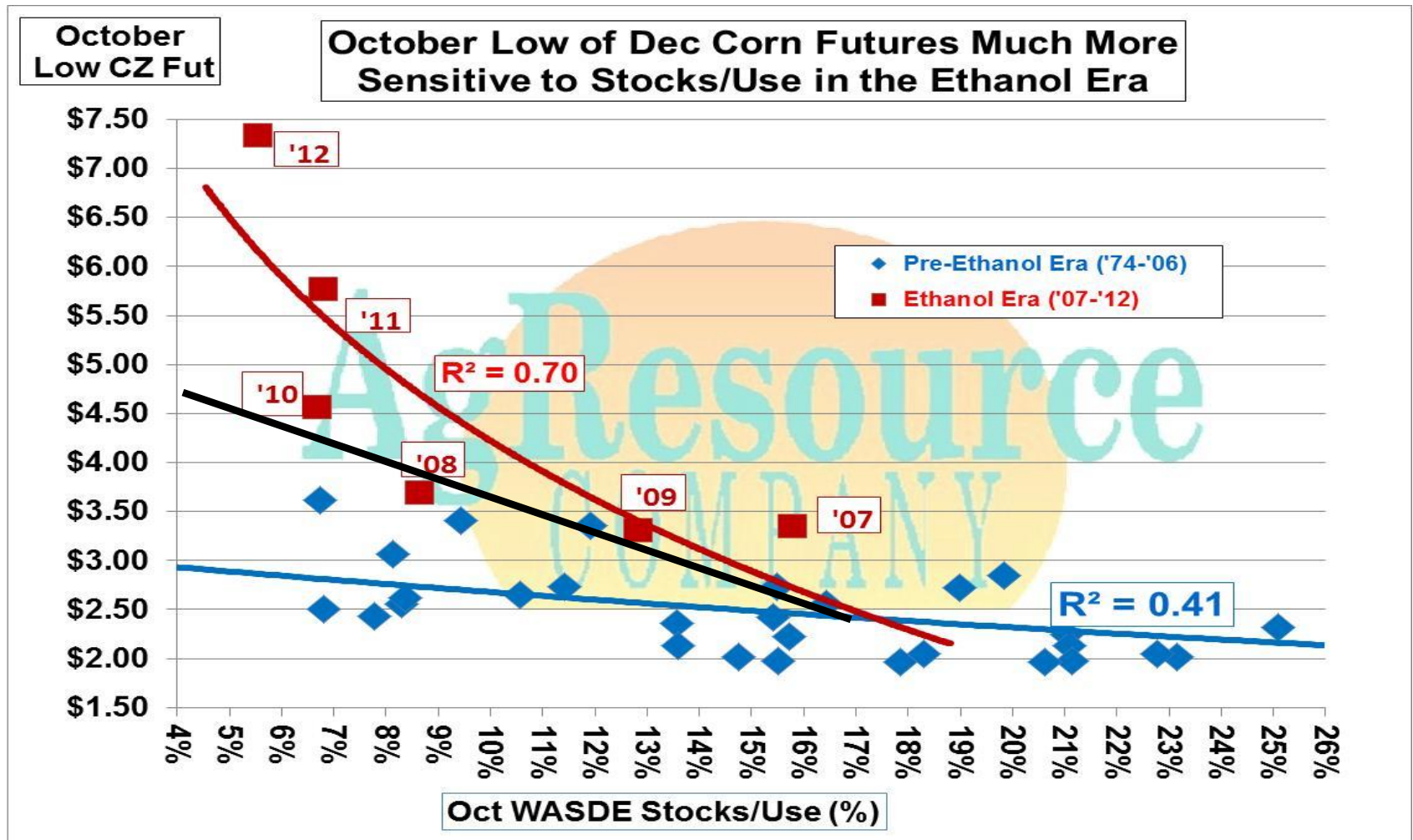
The Fundamental Drivers of the 2007-2013 World Grain Bull?



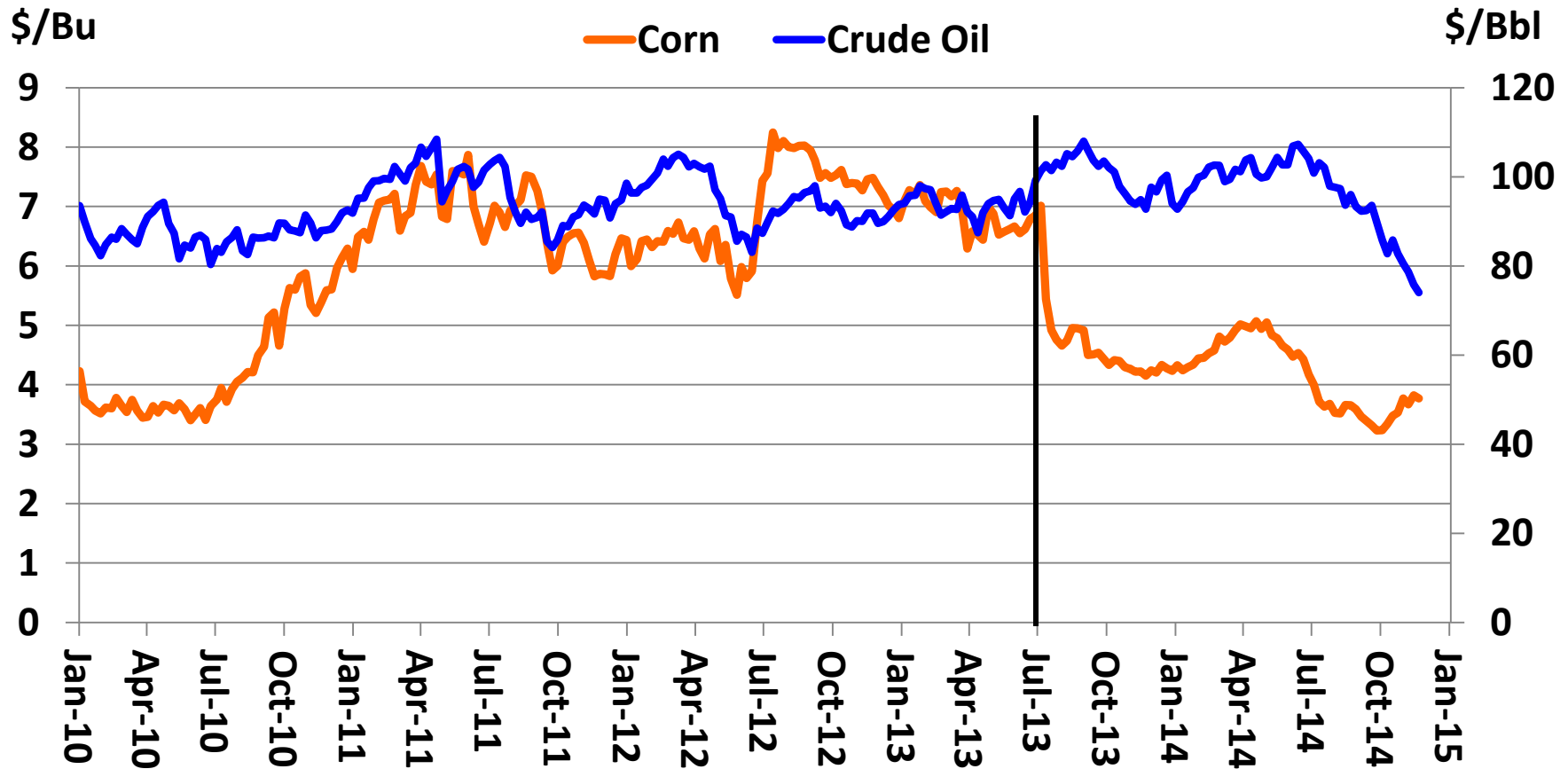
Change in World Grain Use Since 2002 – 137 MMTs of Grain for Biofuels in '13



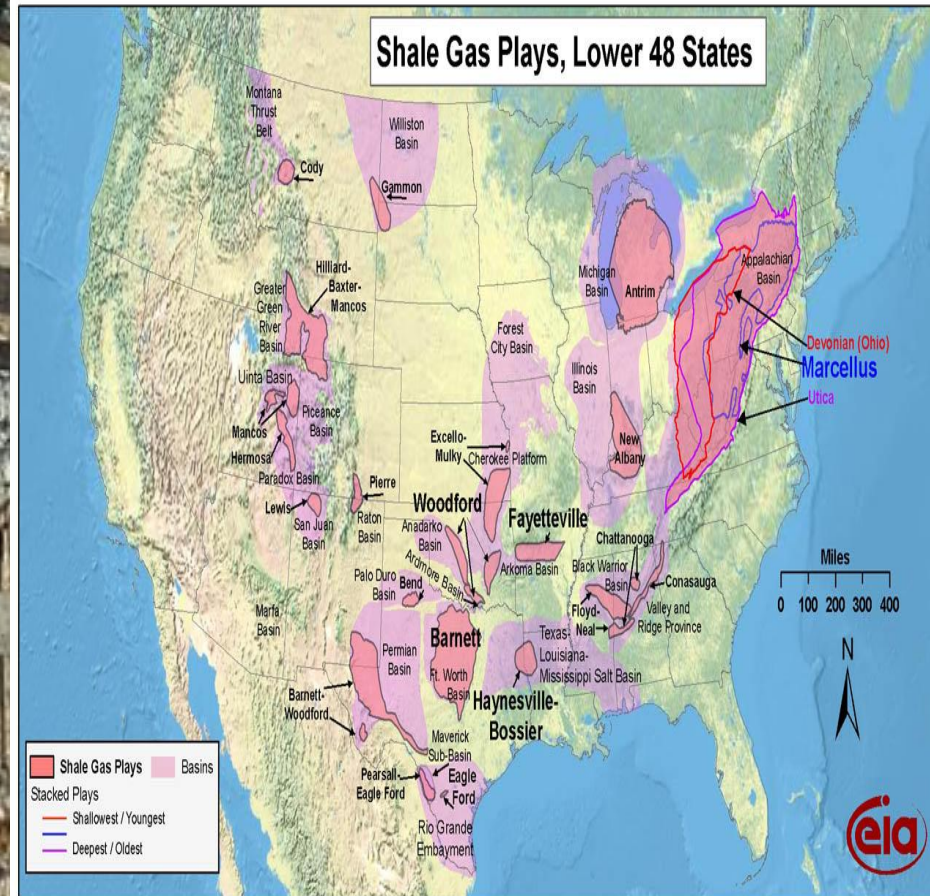
The Price Skews in Corn to be Shifted Downward in 2014 and Beyond



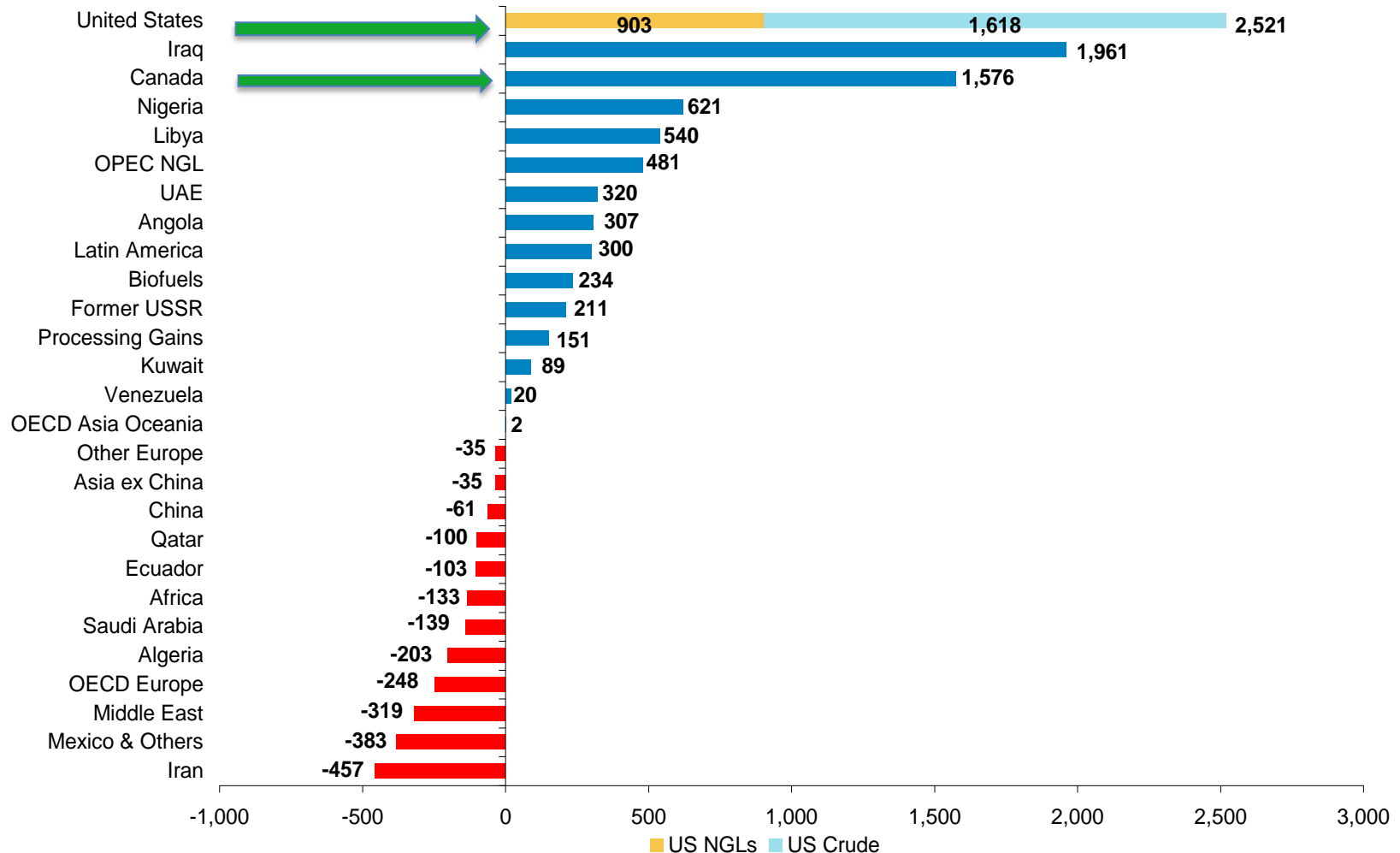
CBOT Corn vs. World Crude Oil – Disconnecting?



FRACKING and Shale Gas in the US



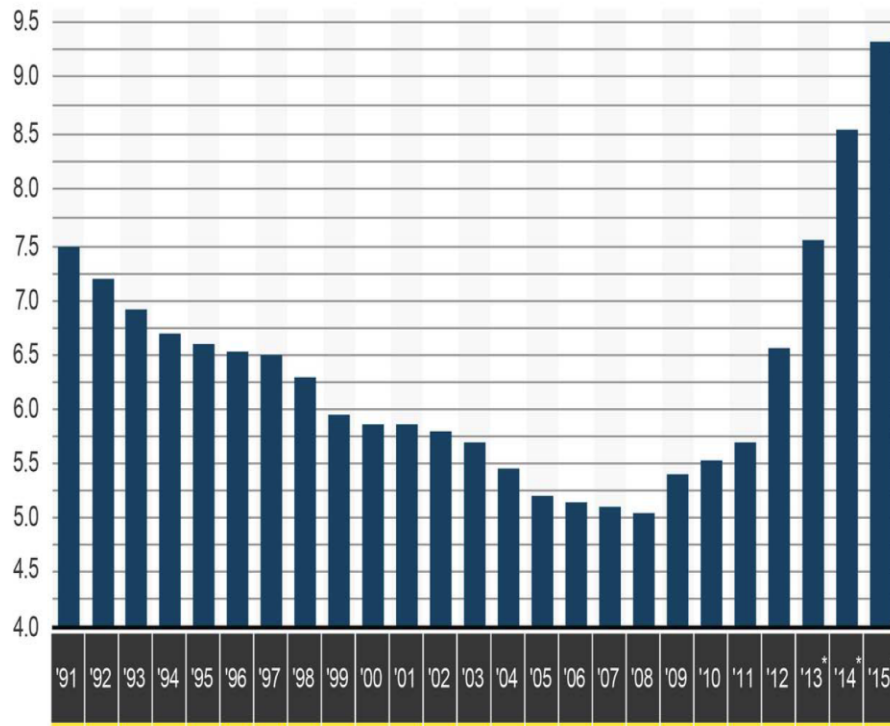
Energy Production Growth Forecast into 2017



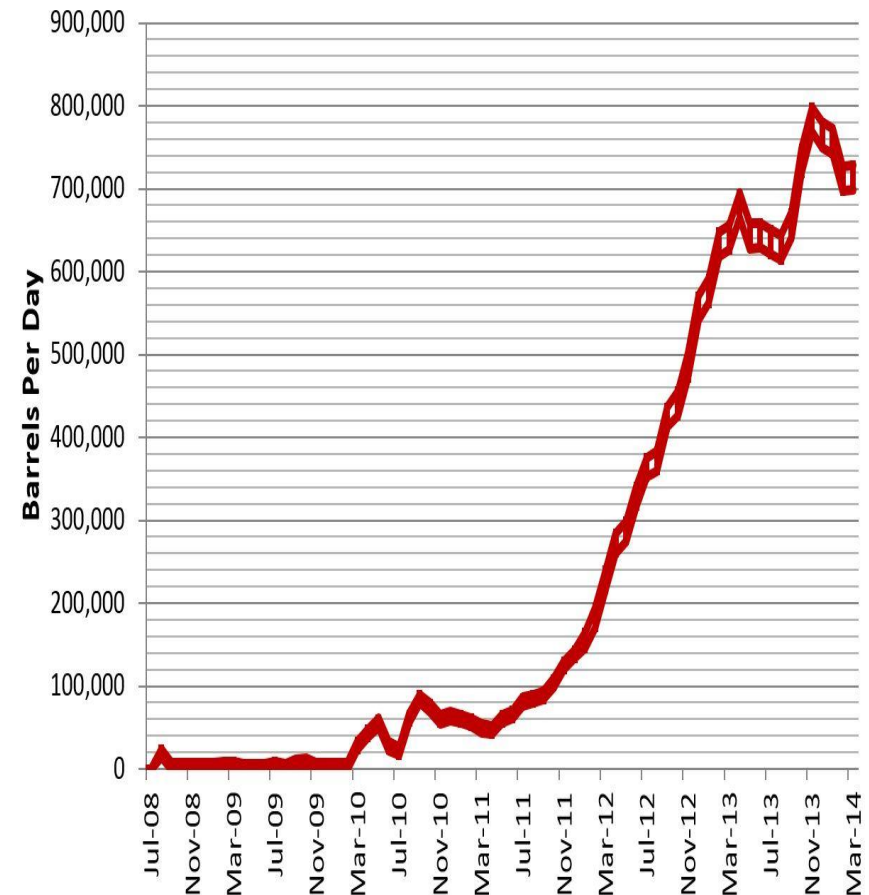
Dramatic Changes in US Rail Industry Demand

U.S. CRUDE OIL PRODUCTION

MILLIONS OF BARRELS PER DAY

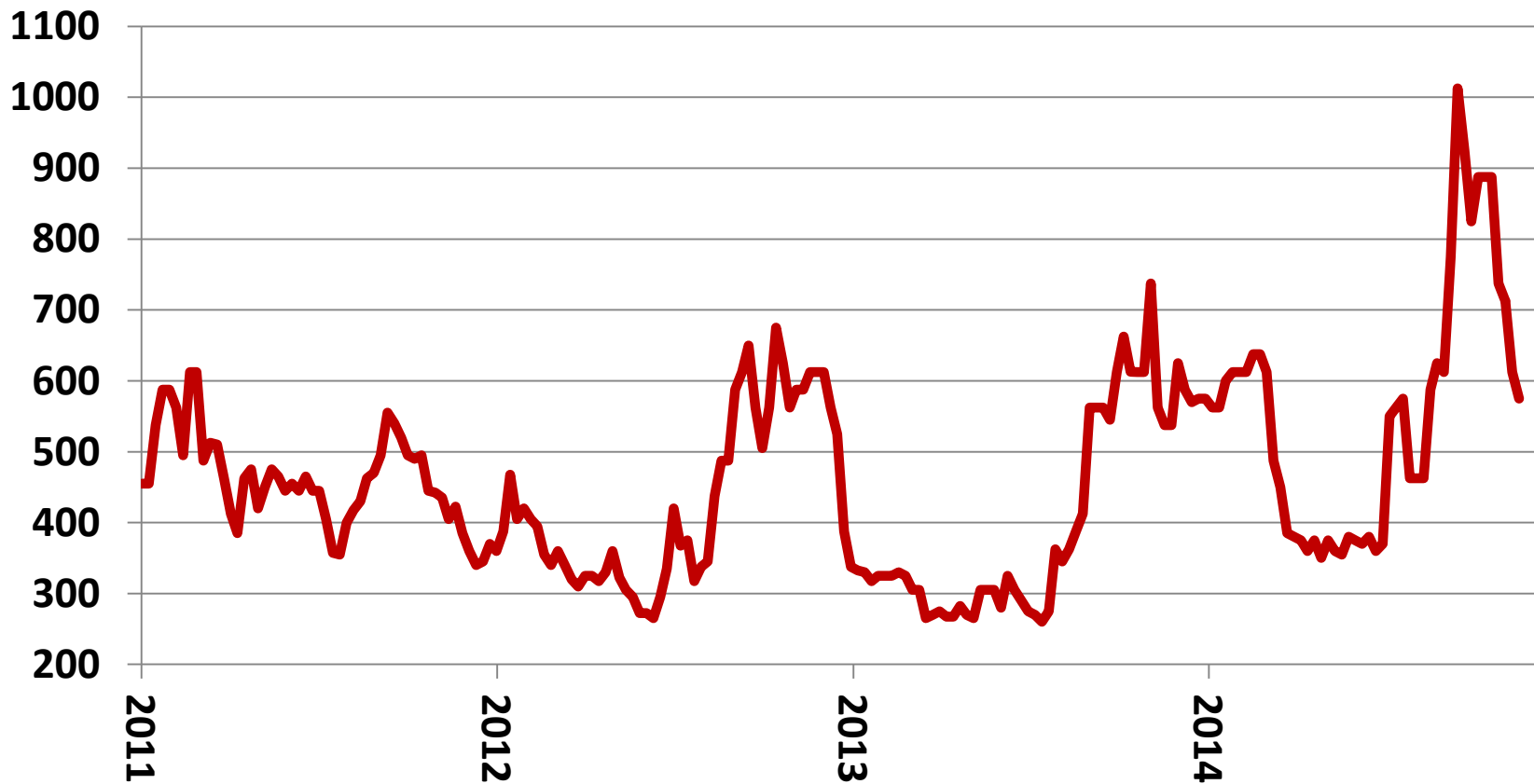


Estimated North Dakota Rail Export Volumes

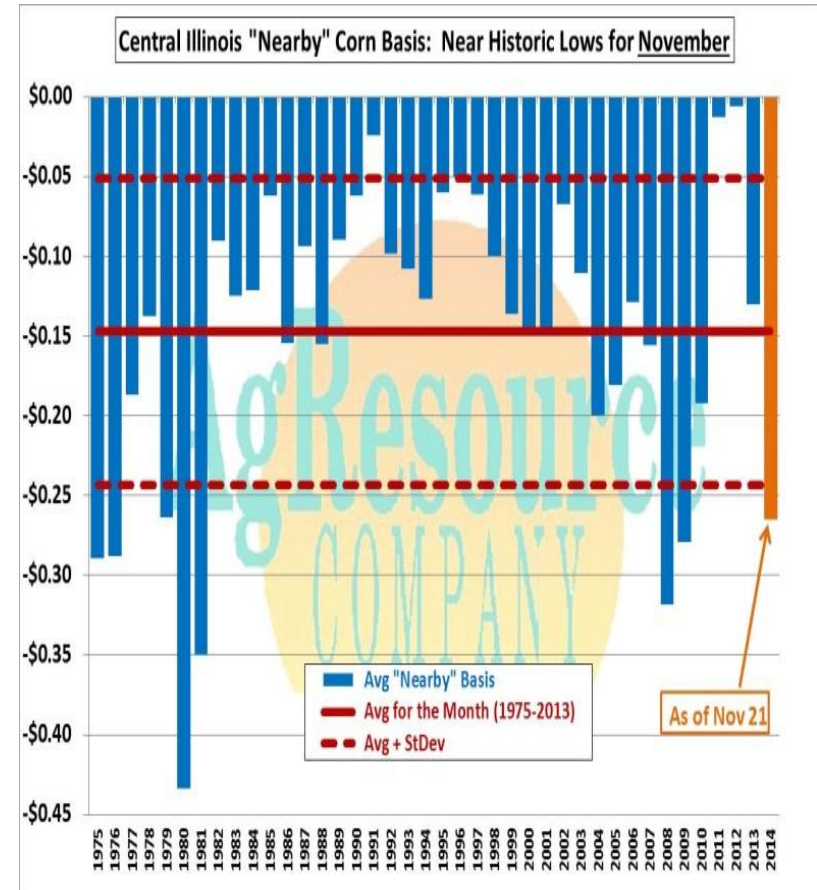
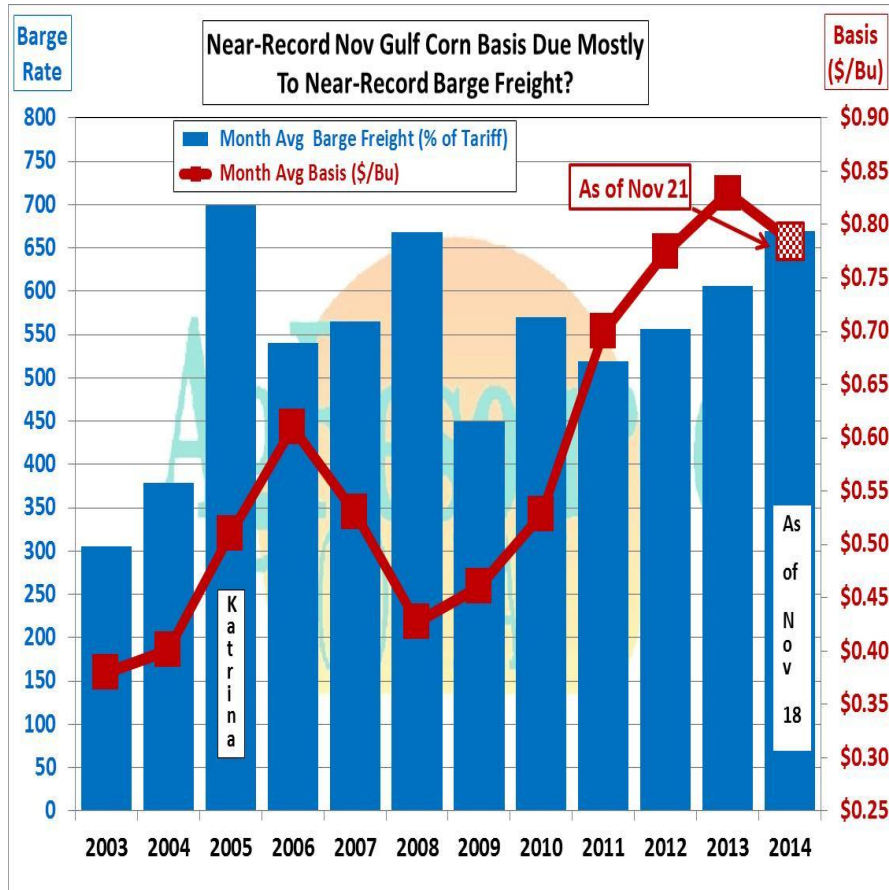


Freight Charges For Barge also Rising Sharply

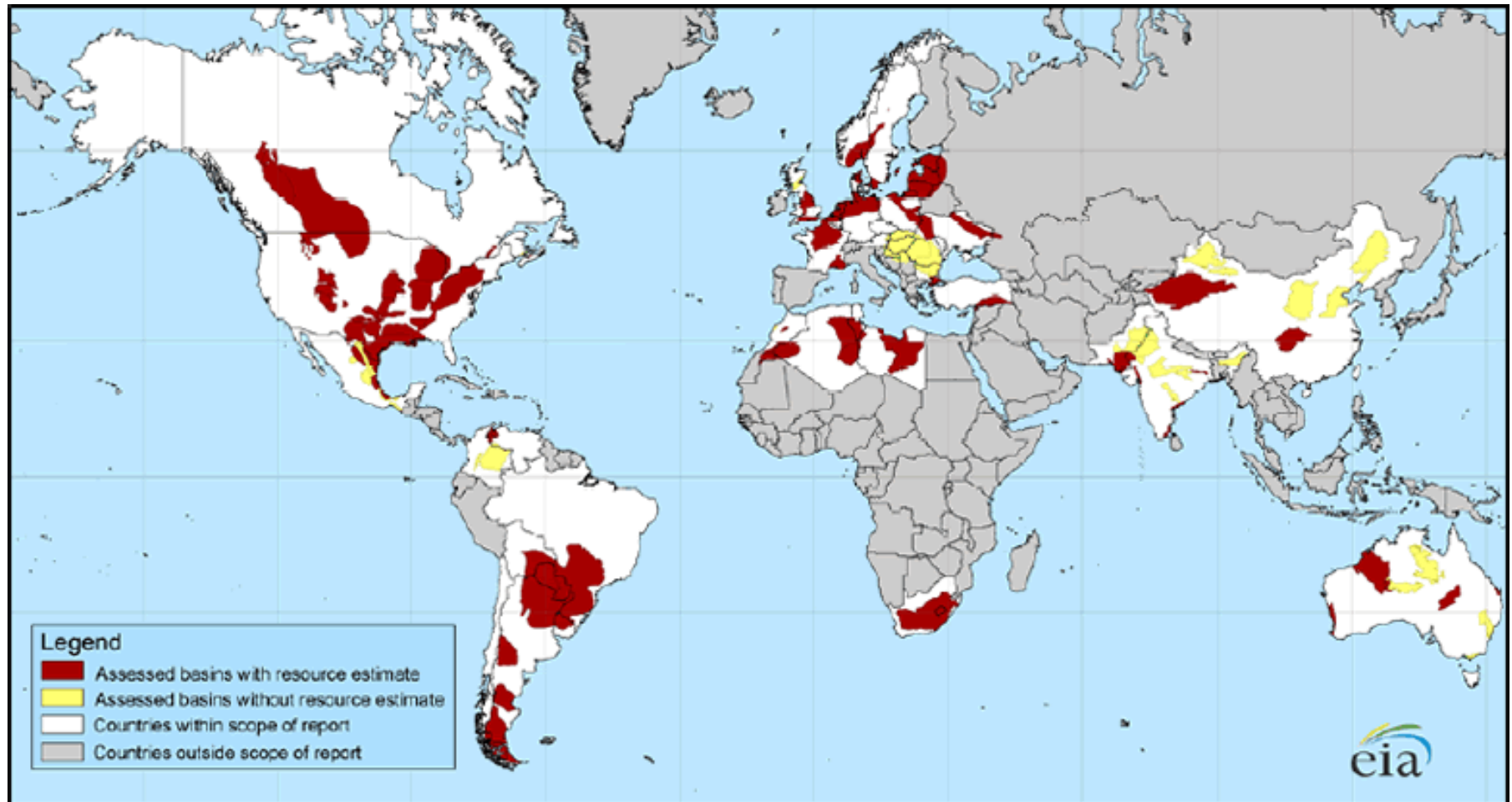
Illinois River Barge Rates (As % of "Tariff")



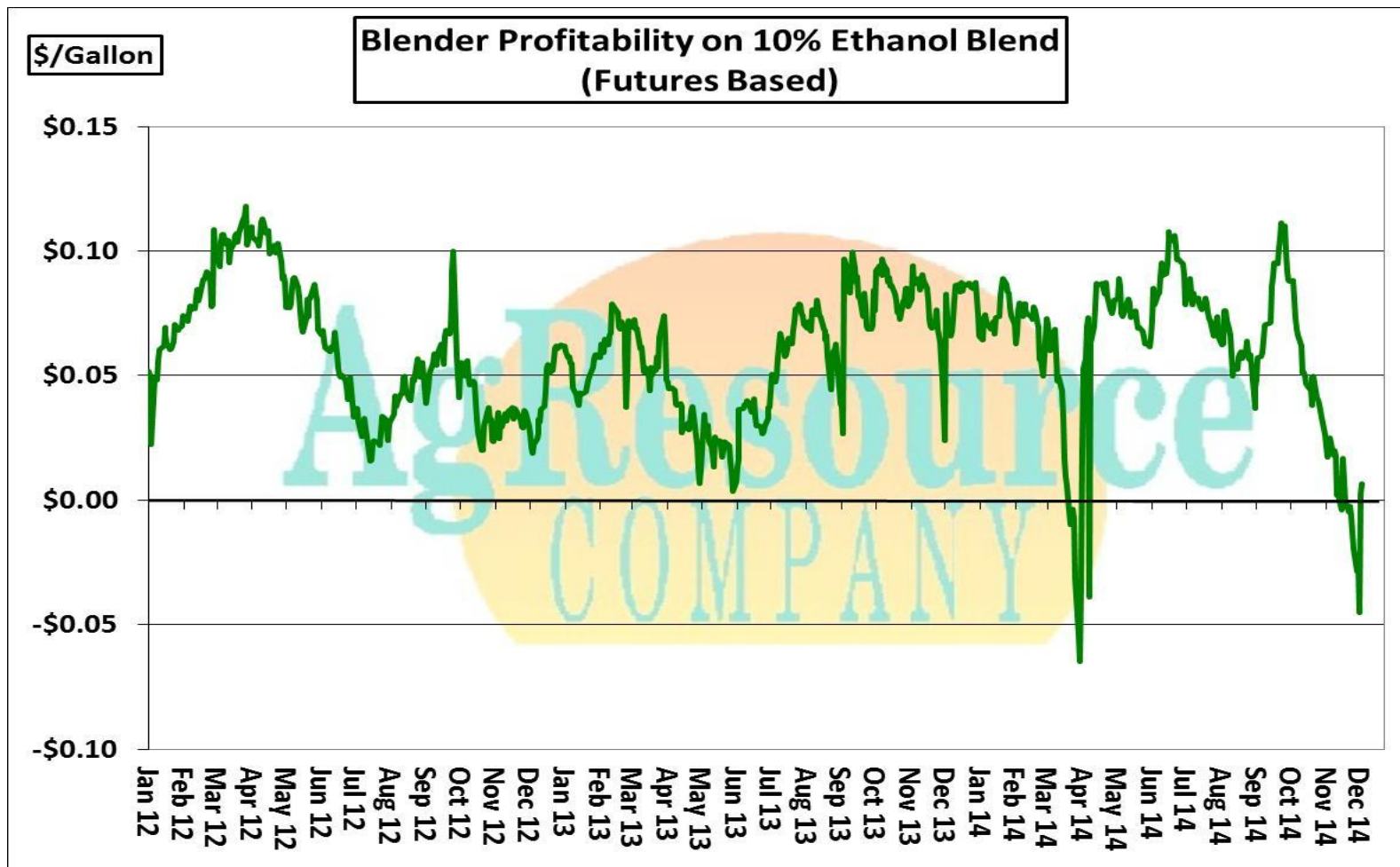
High Freight Costs leads to strong Gulf Basis and Cheap Interior



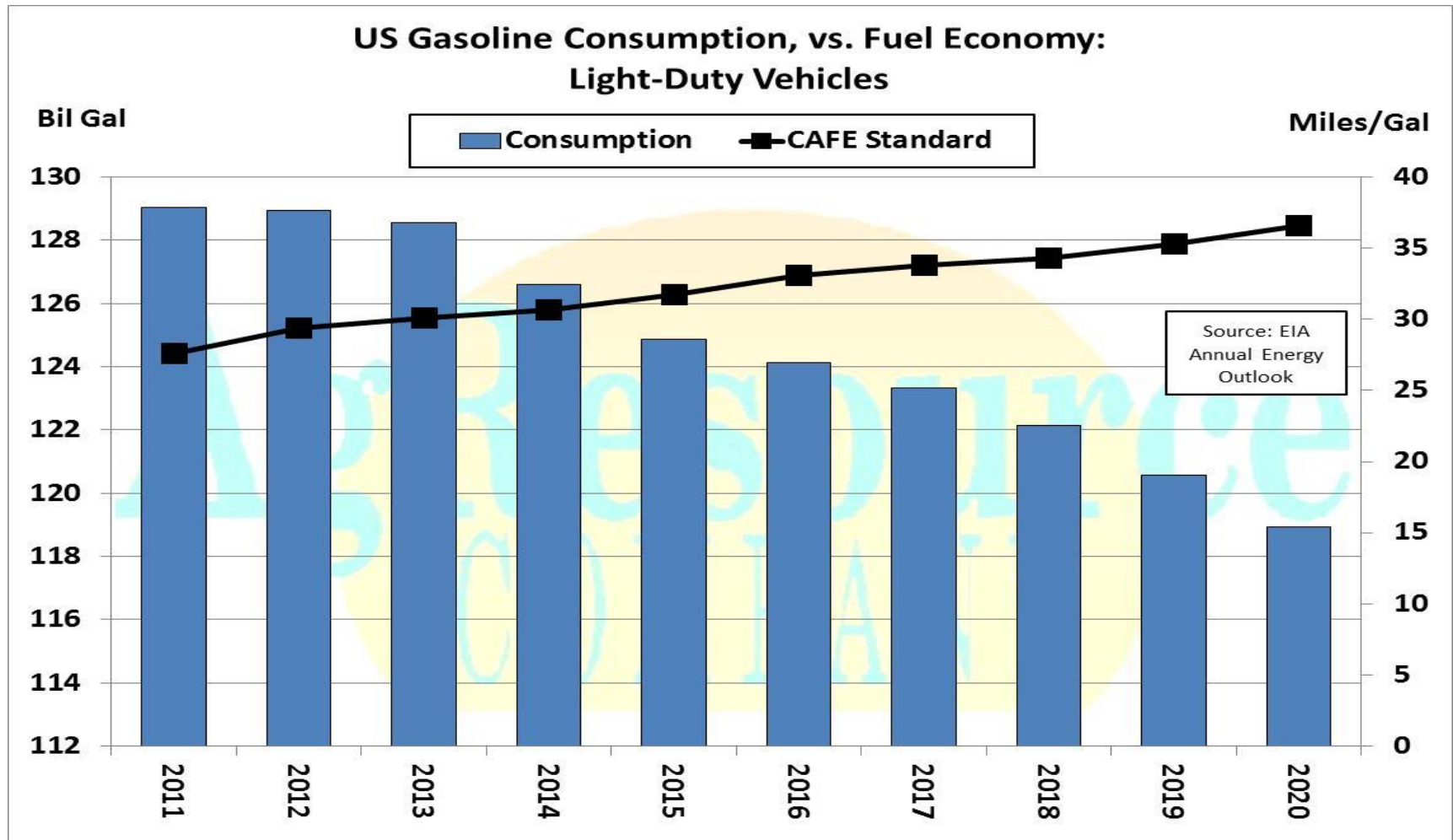
Fracking to go Global into 2020 – A World Awash in Gas



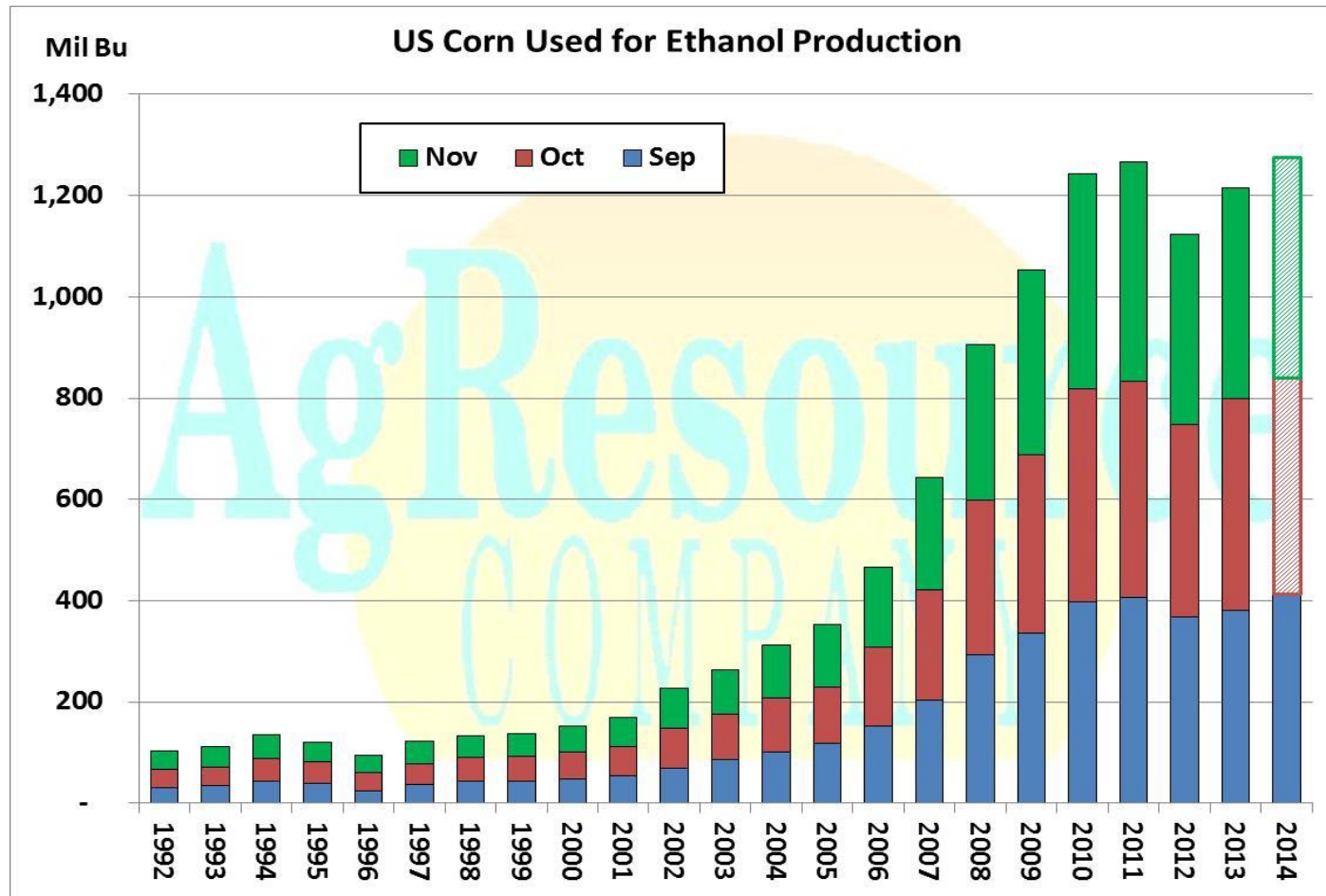
US ethanol more expensive than unleaded gasoline



US Gasoline Consumption: Fuel Economy Offsetting More Miles Driven

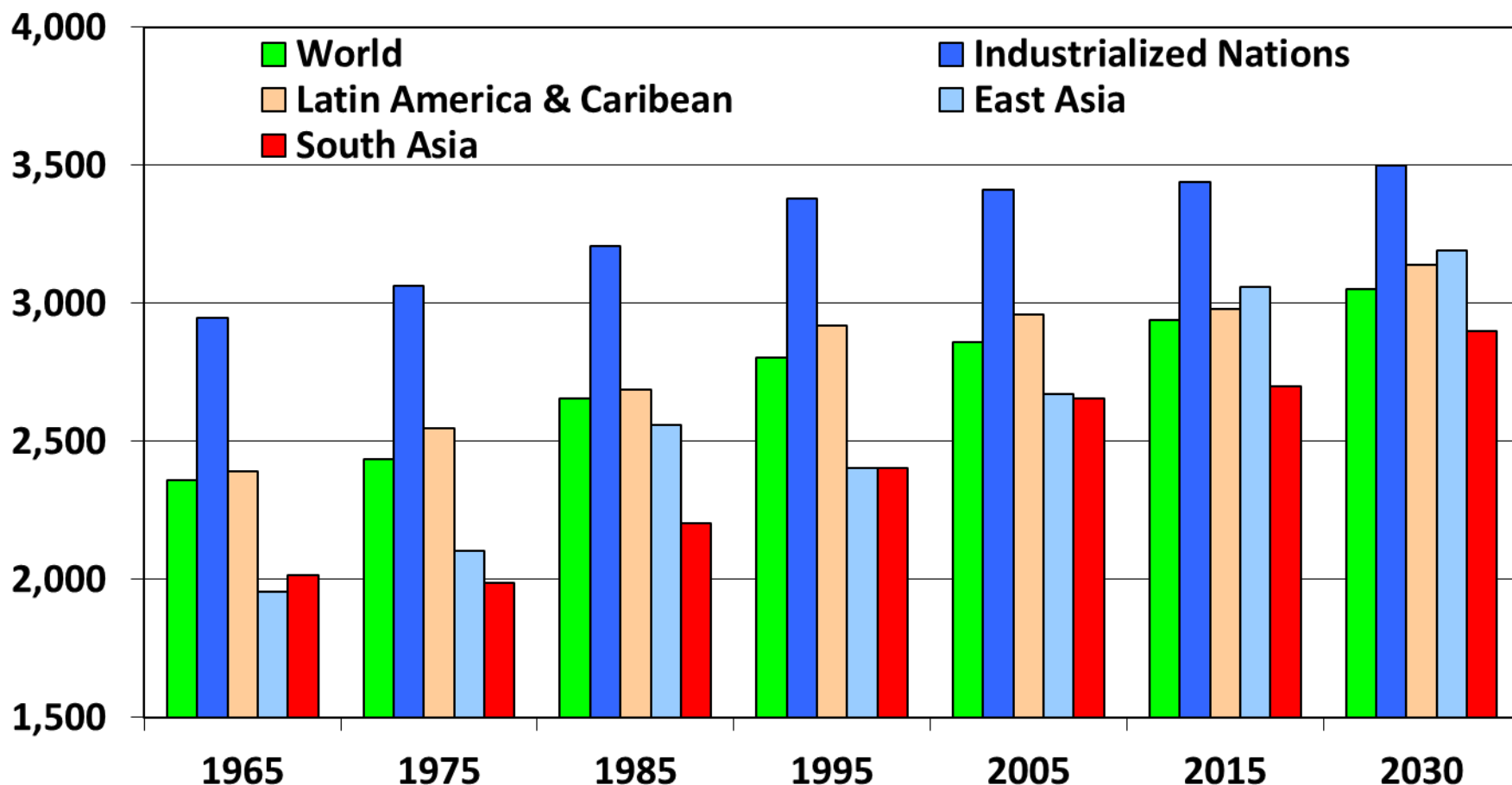


US Ethanol Demand No longer a bullish driver

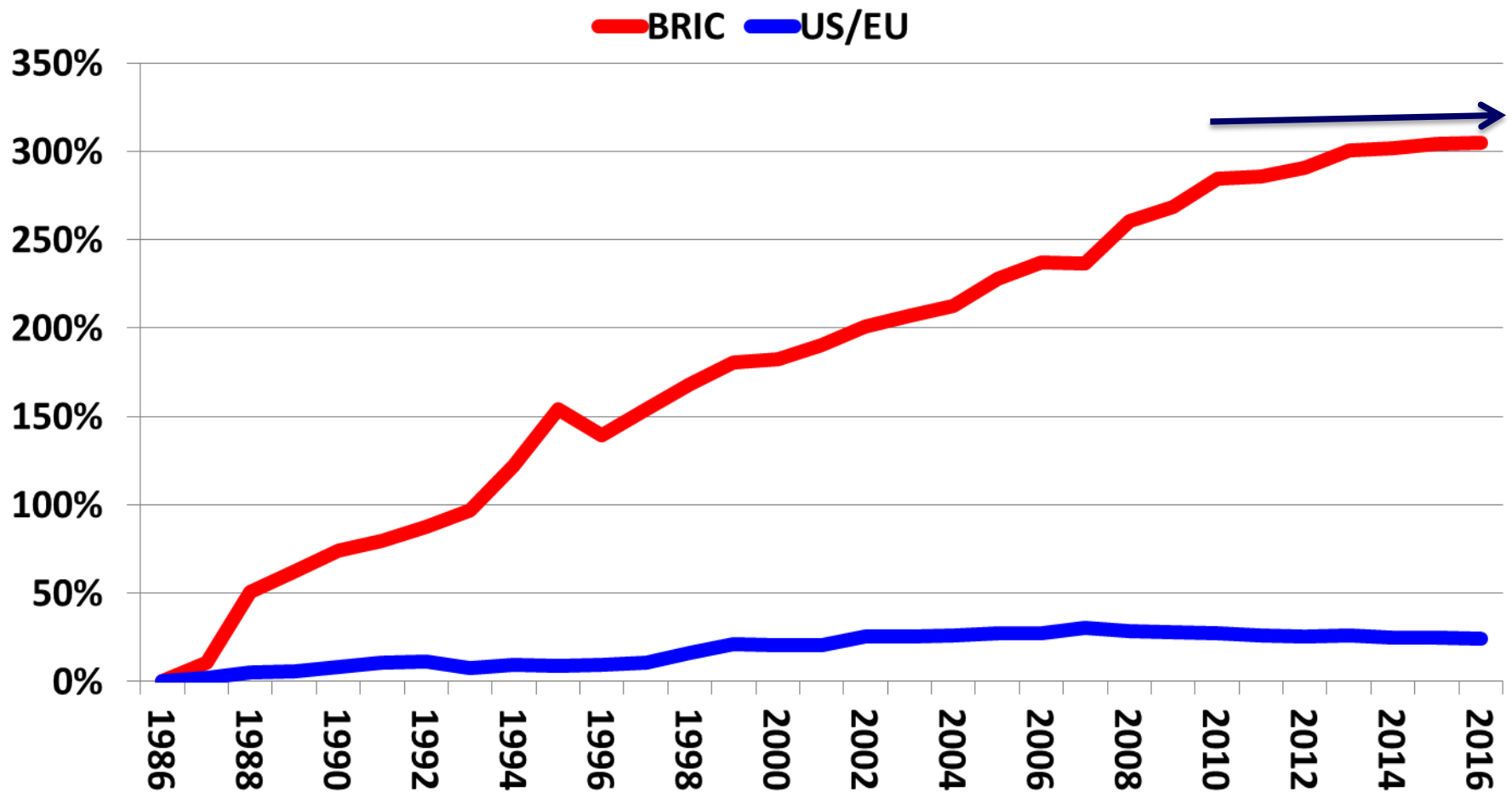


Per Capita Food Consumption

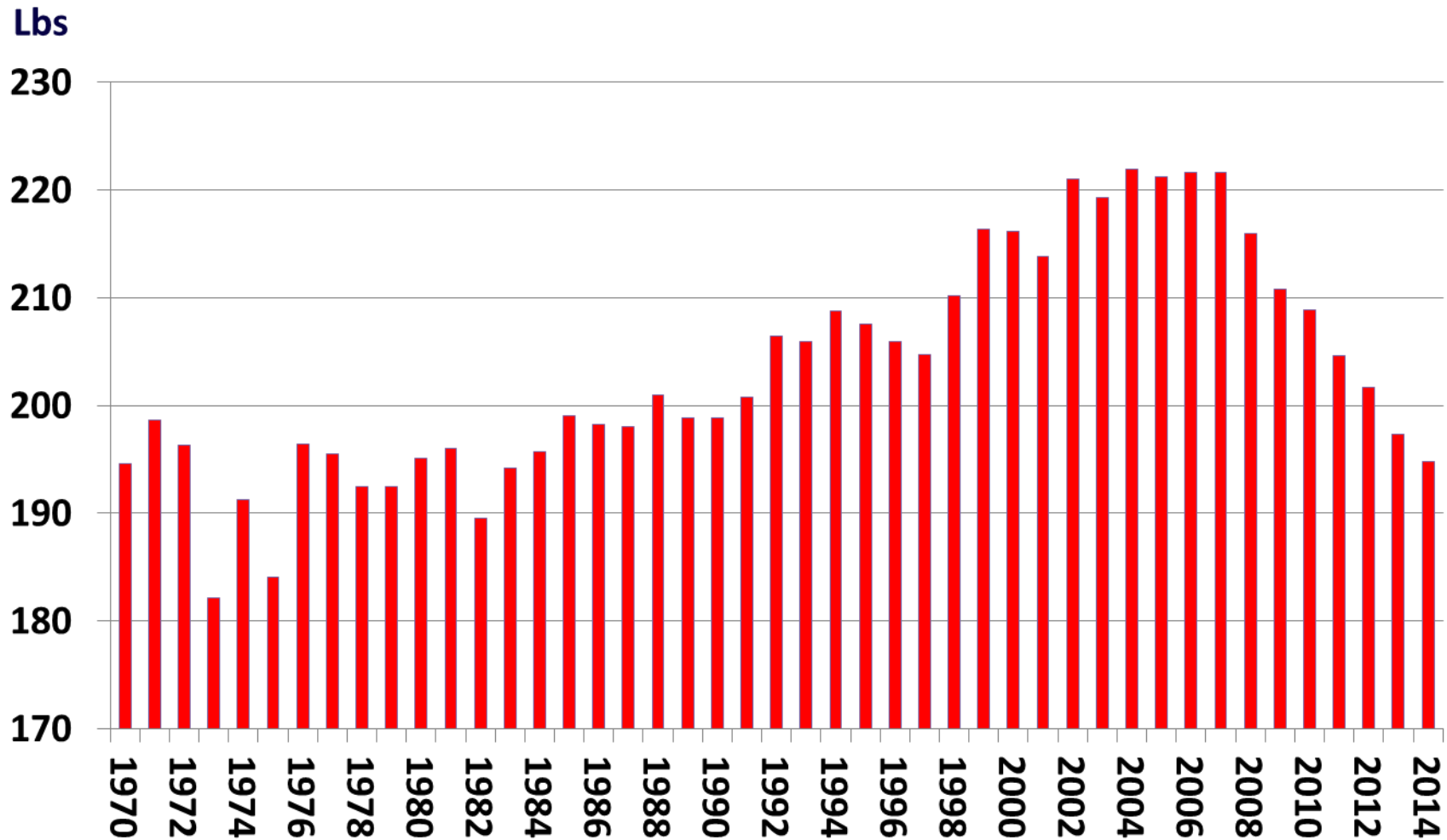
(kcal per capita per day)



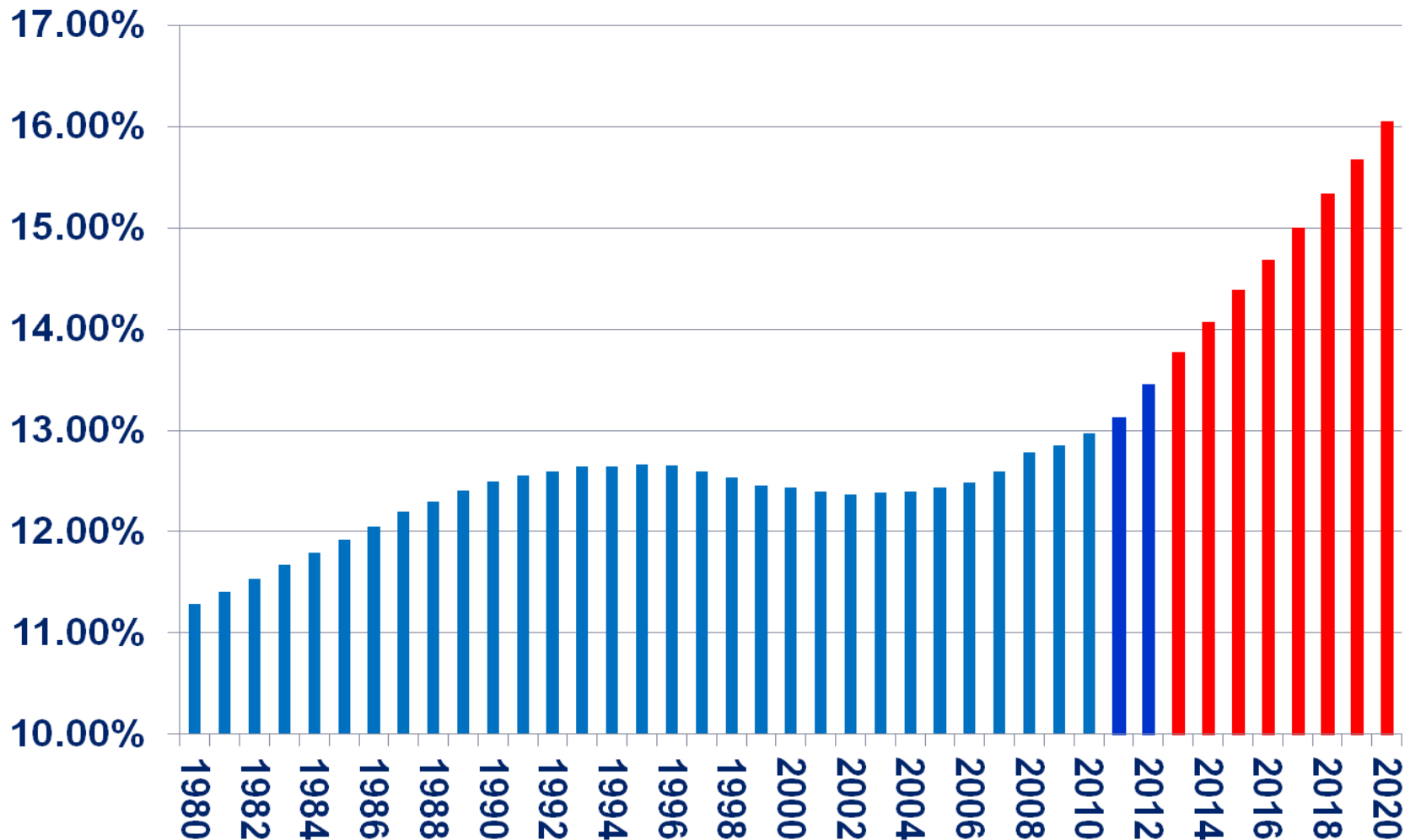
Growth in World Meat Consumption – Flattening!



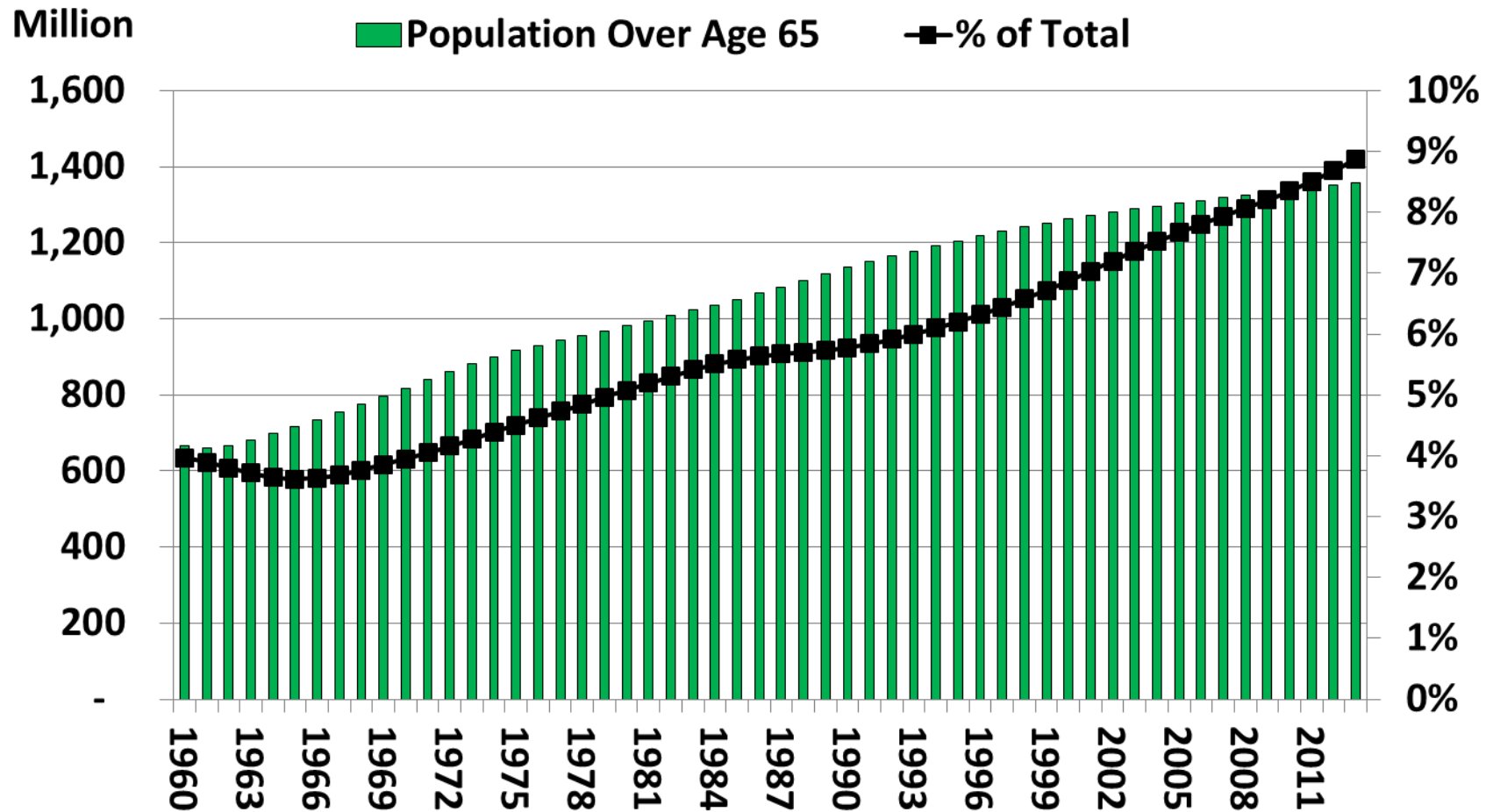
US Per Capita Meat Consumption – Lowest Since 1985!



The Aging of the US Population: % 65 Years and Over



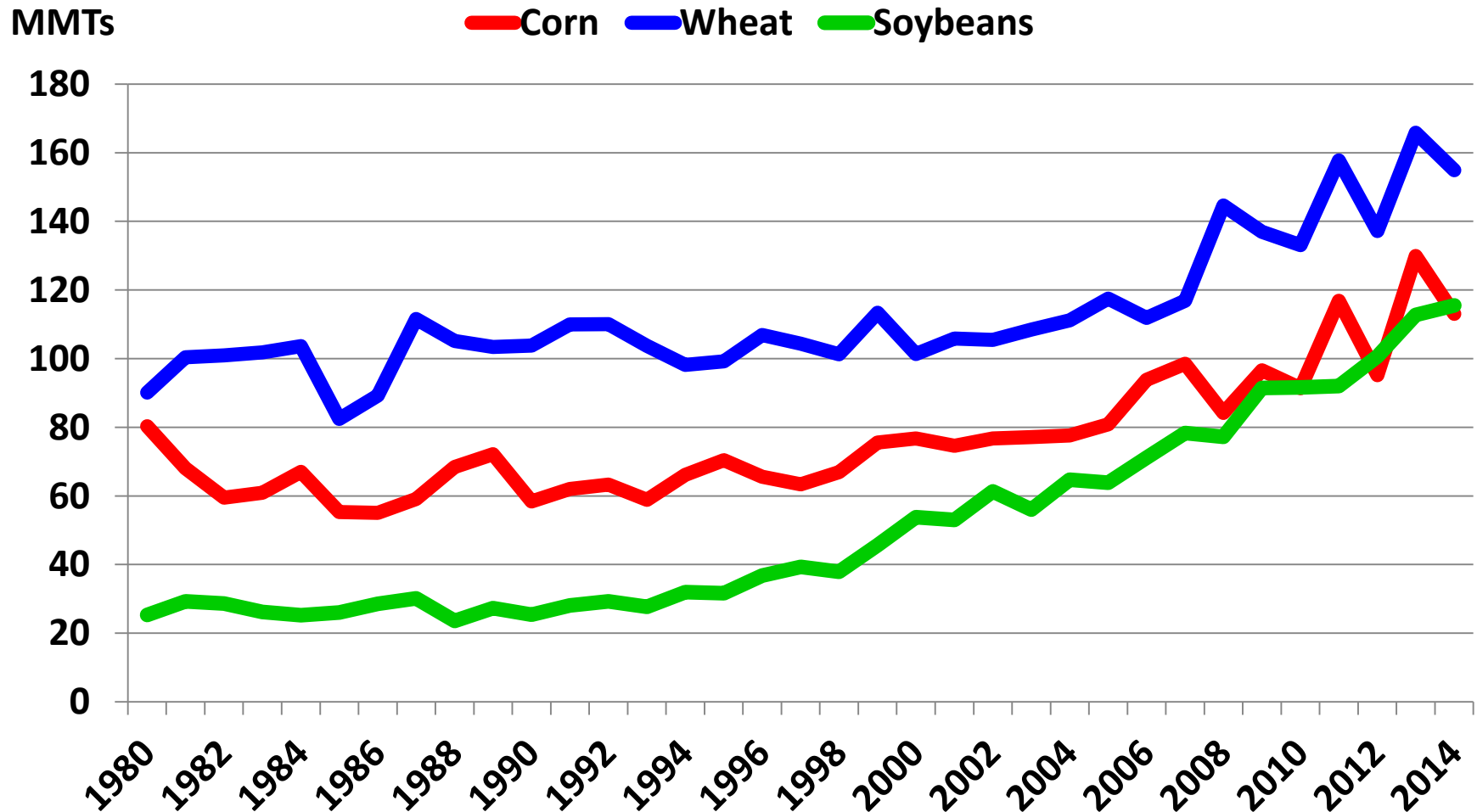
China's Aging Population



Rising Competition for World Grain Export Share!



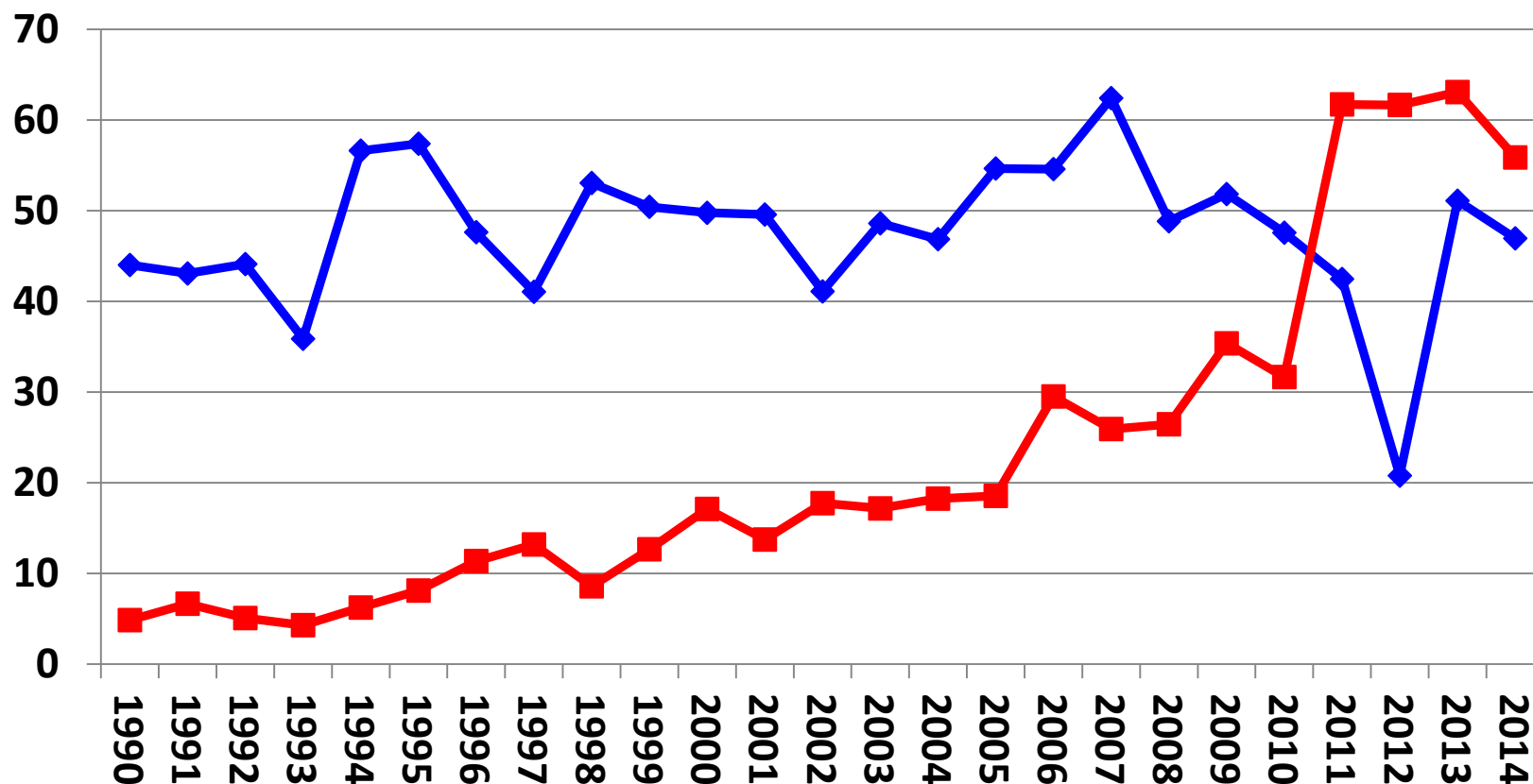
World Corn, Wheat and Soy Trade



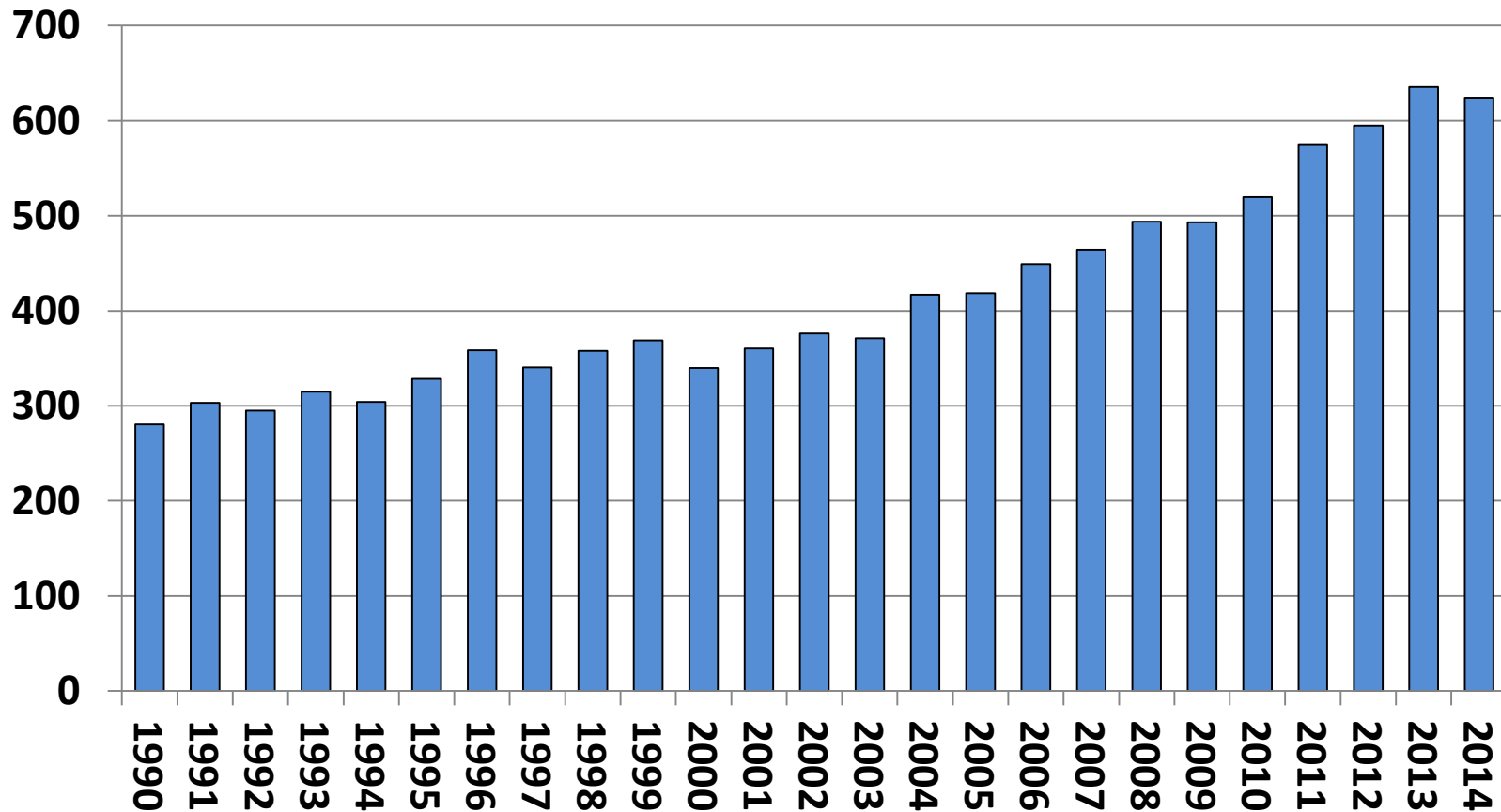
World Corn Trade – South America and the Black Sea Soaring

MMTs

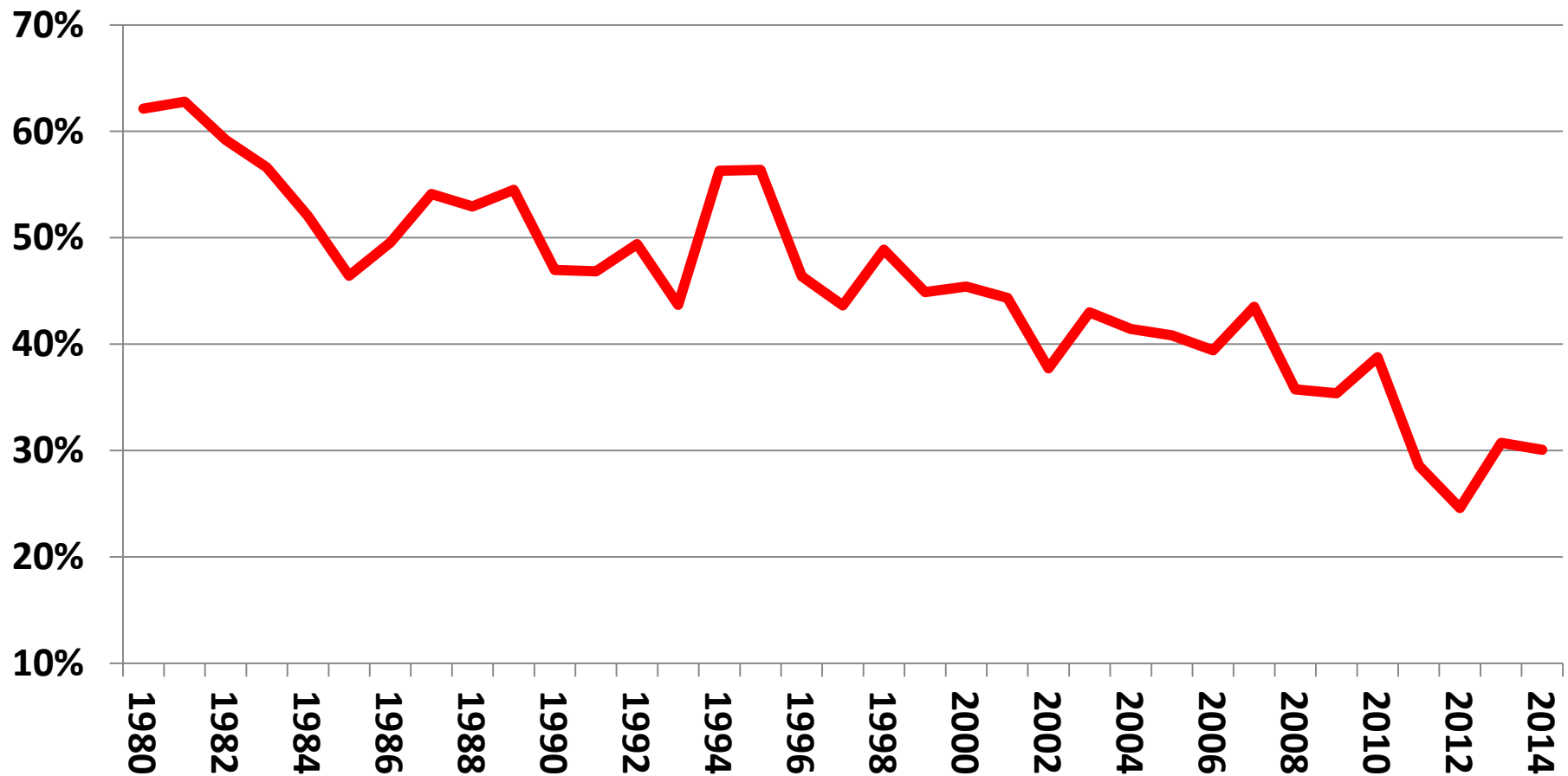
—◆— EU + US —■— S America + Black Sea



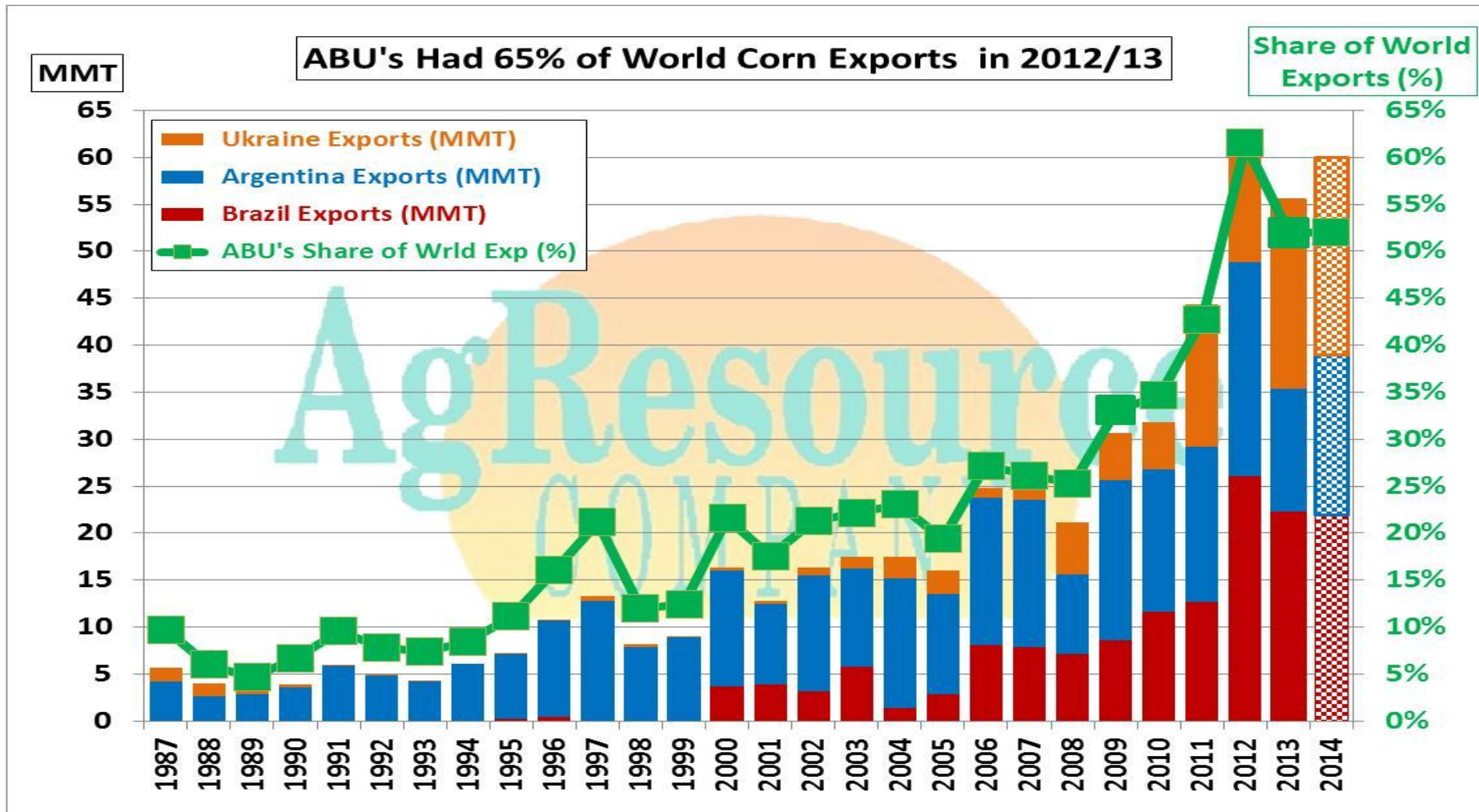
Non-US World Corn Production: 63% of Total



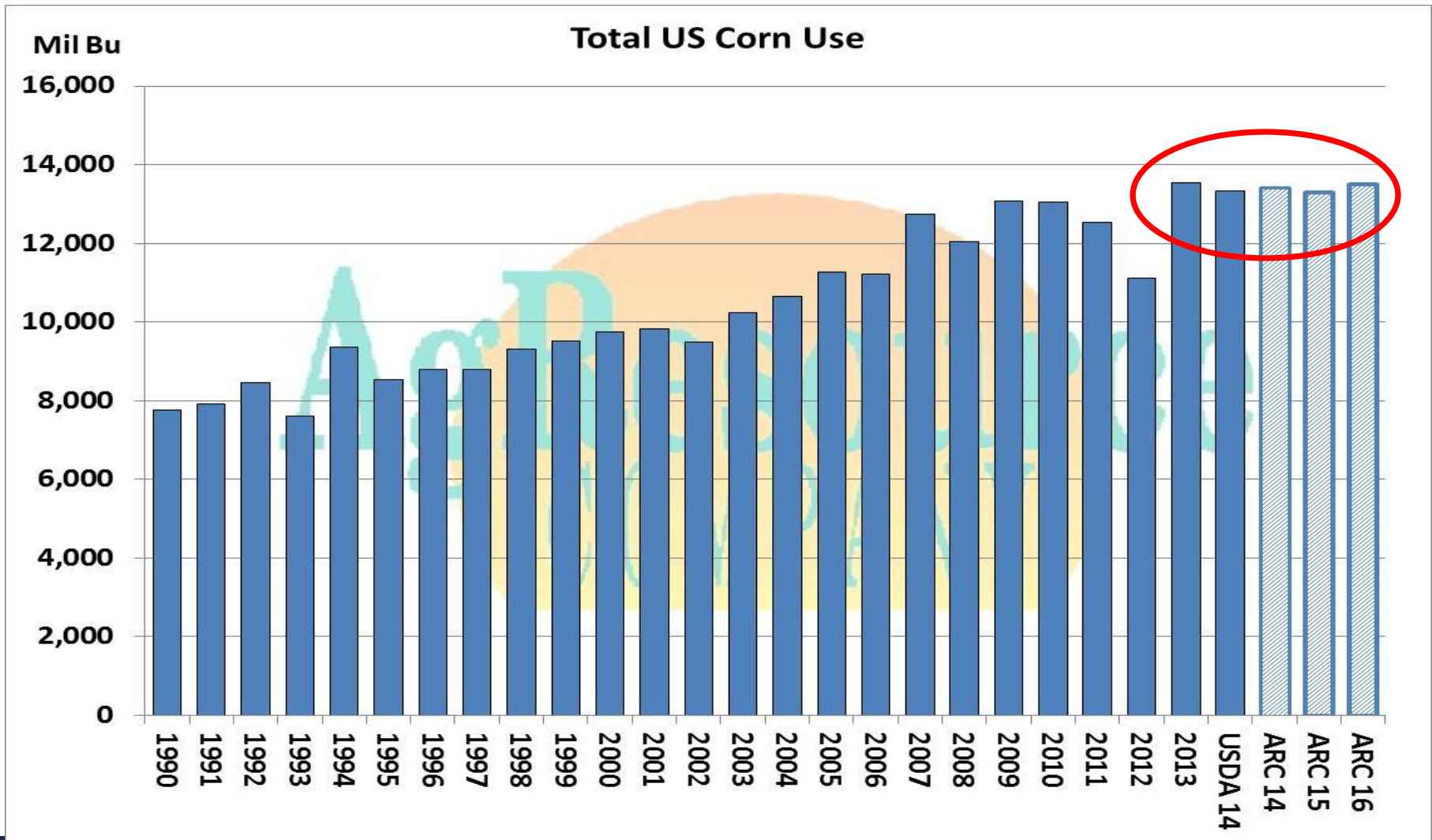
US Share of World Trade – Corn, Wheat, Soy: 30% - Record low in Non Drought year!



ABU Corn Exports Reach 65% of The World Feed Grain Trade.

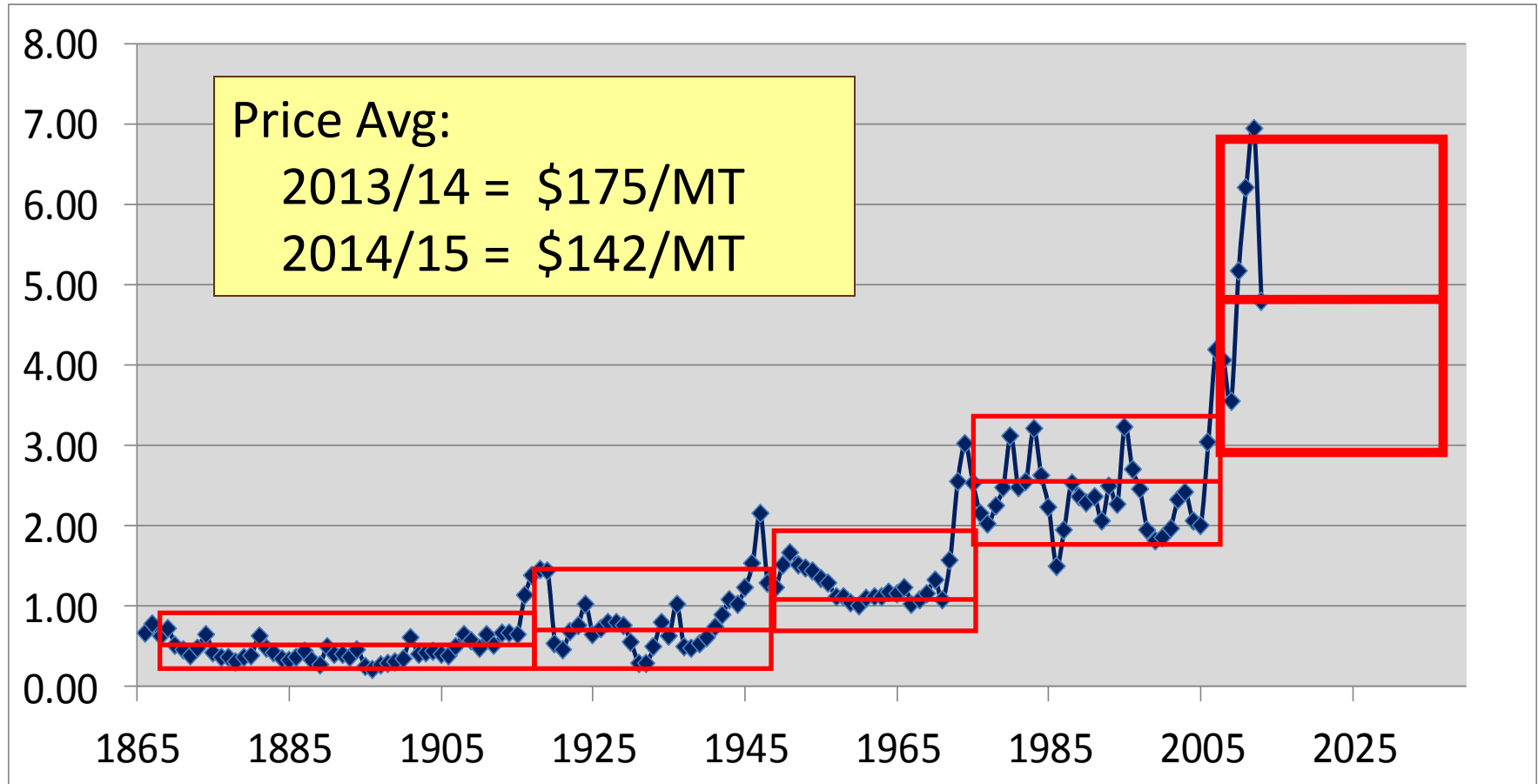


US Corn Demand to Hold Around 343 MMTs or 13.5 Bil Bu



A New Range for Corn?

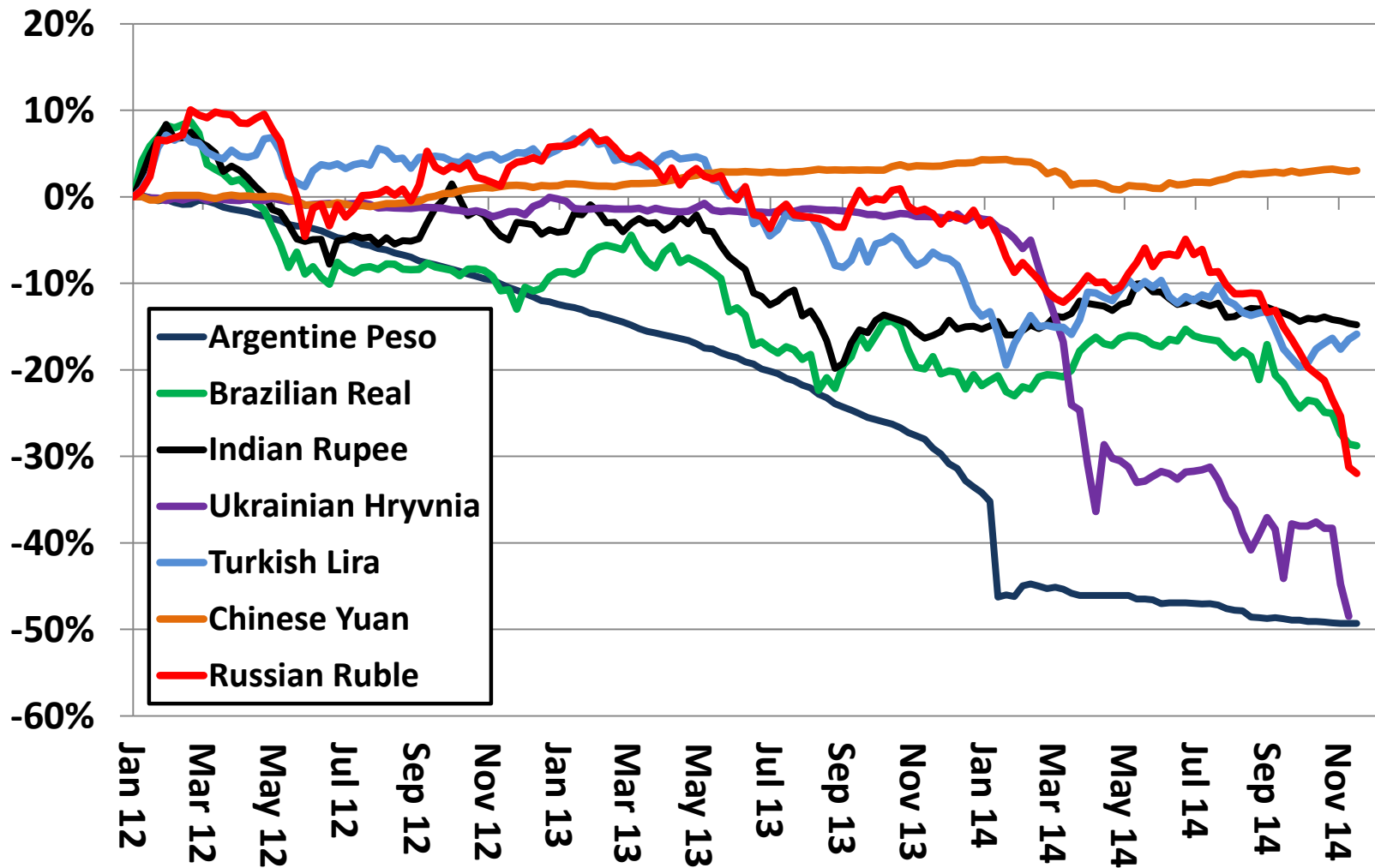
Nominal Corn Prices, (1866-2014)



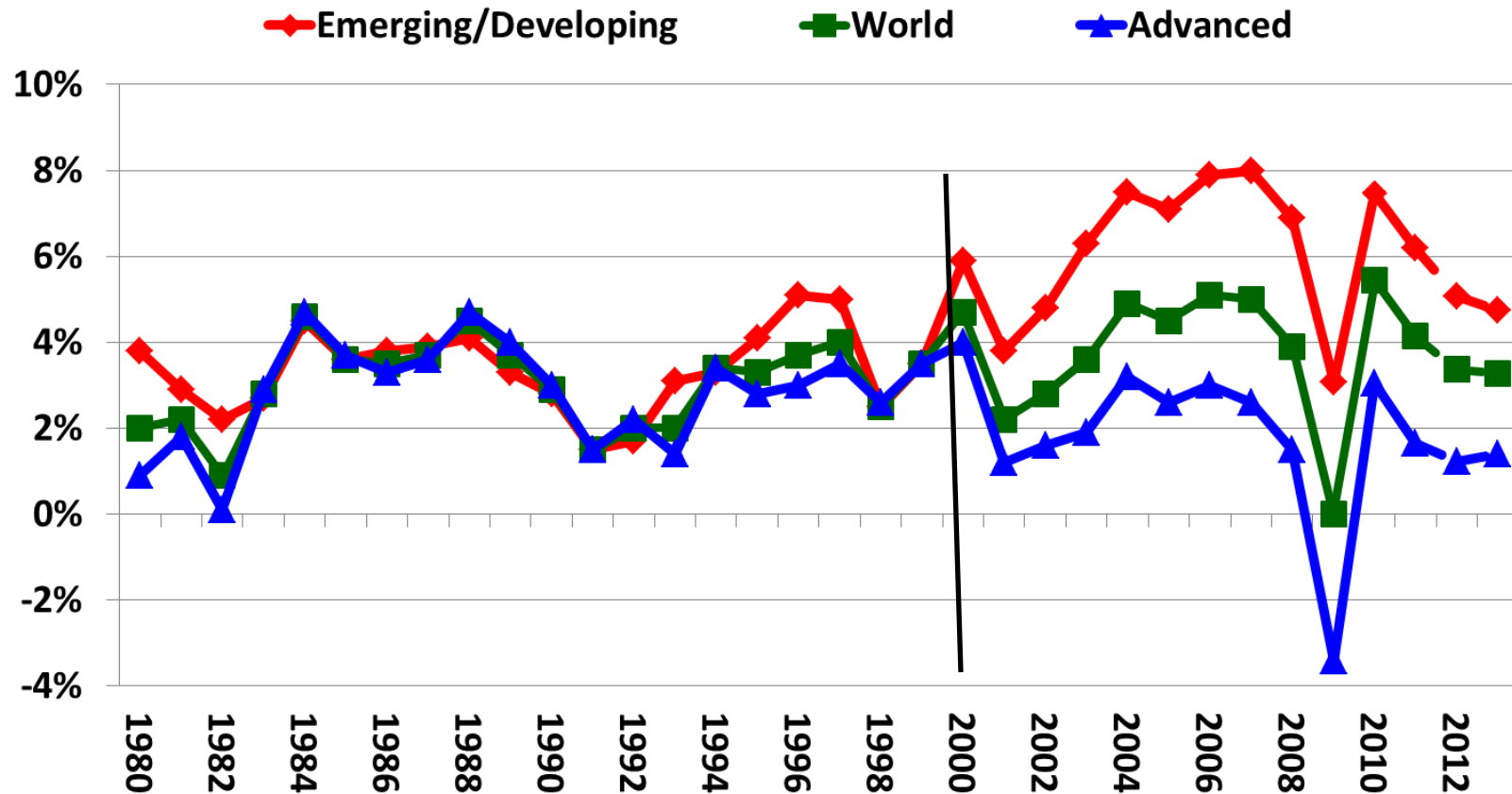
King US Dollar! Rare times that US Economy Outperforms the World



World Currency Performance Since 2012



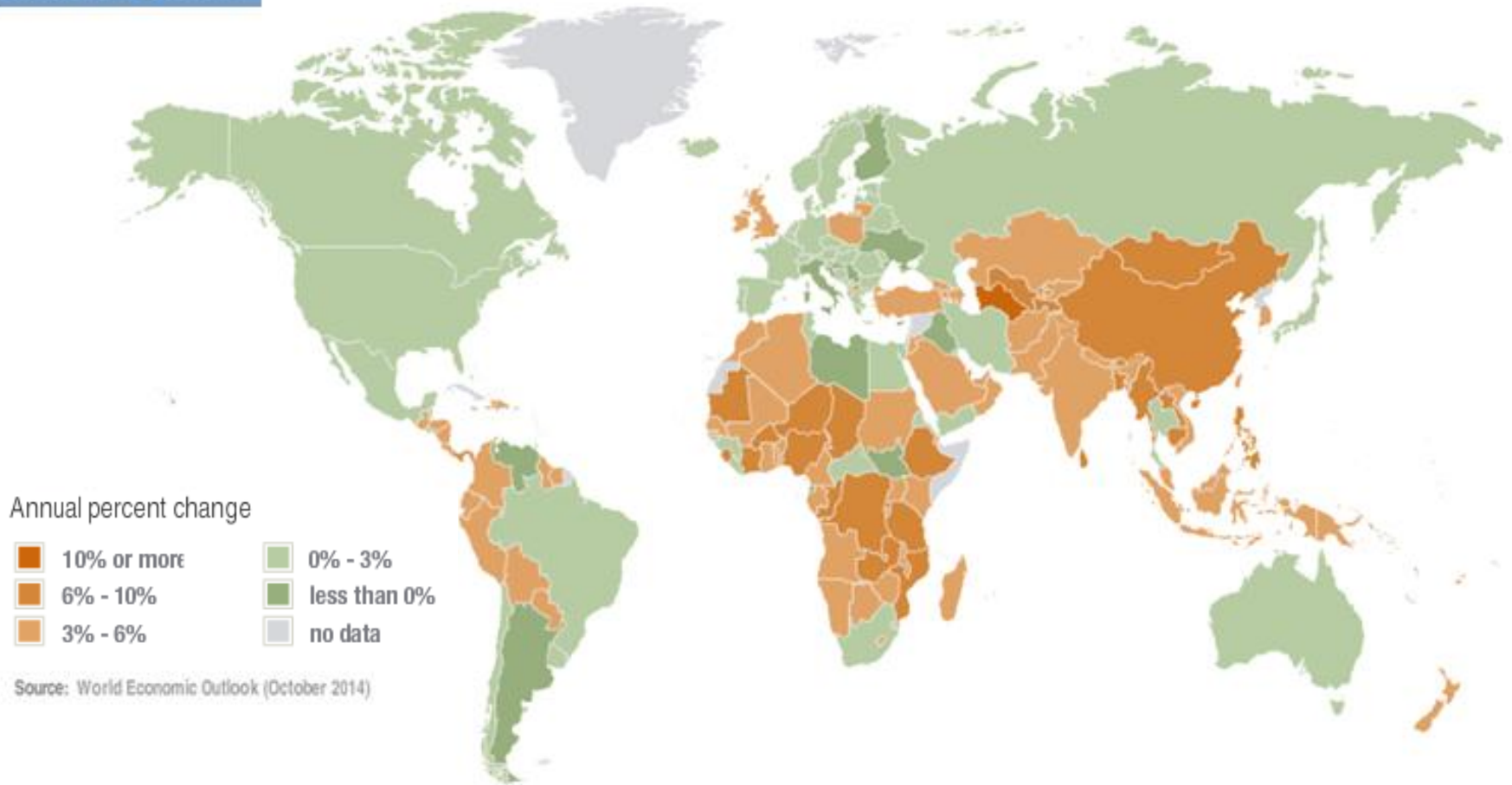
World GDP Growth Rates



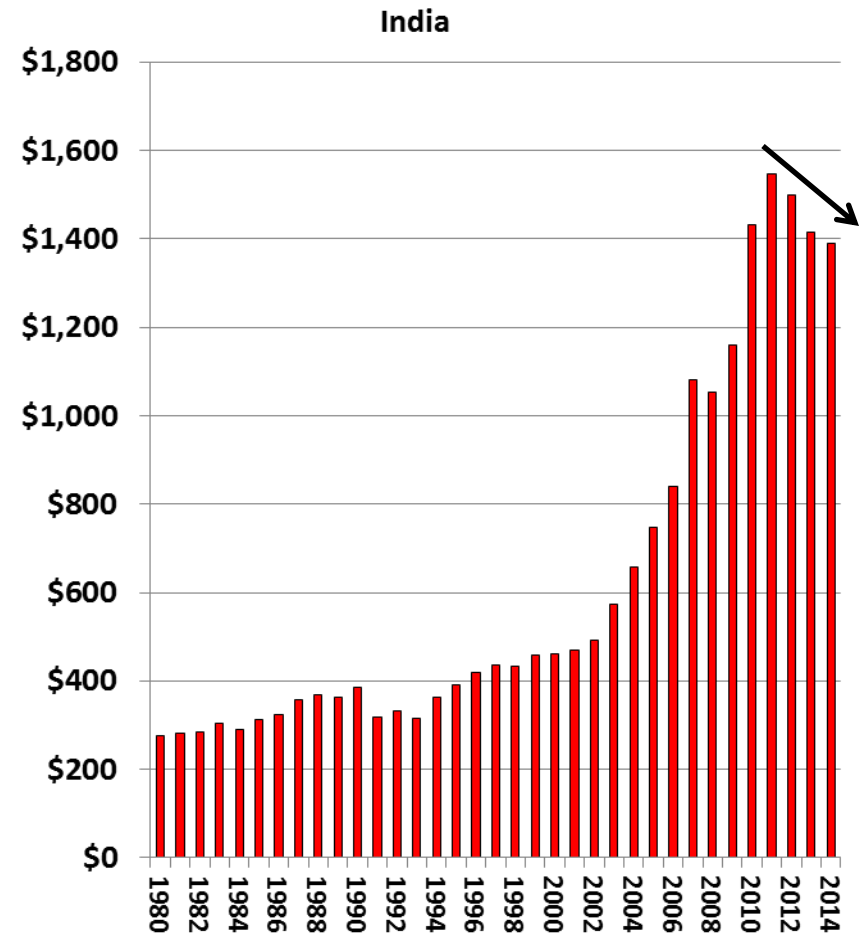
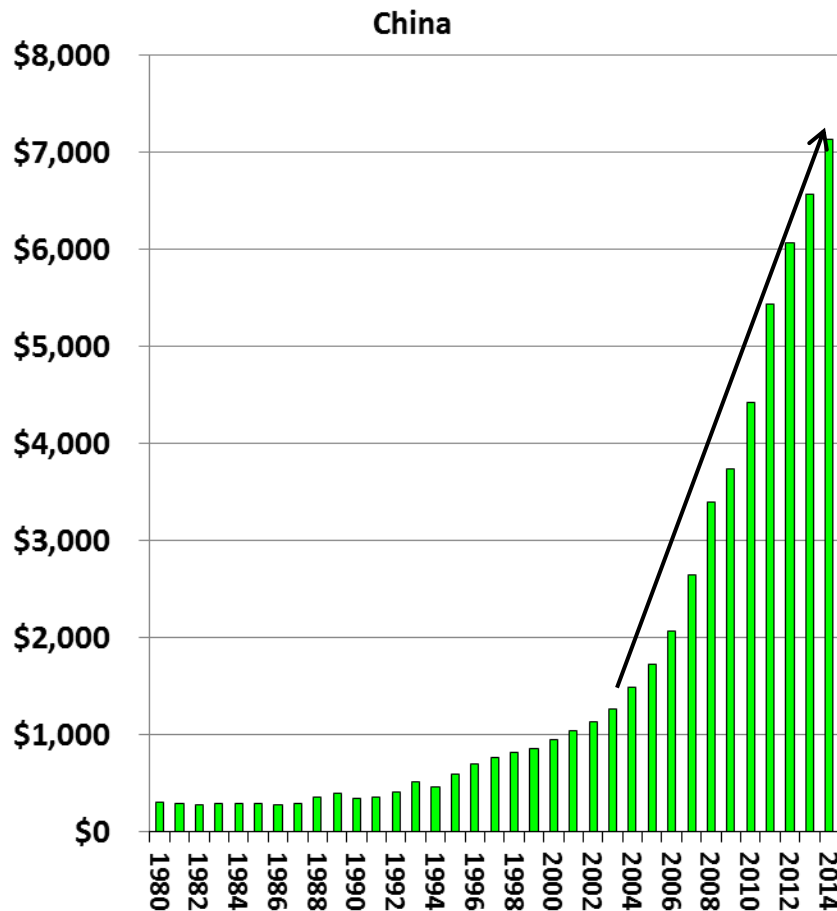
Late '14 World GDP Growth

IMF Data Mapper®

Real GDP growth

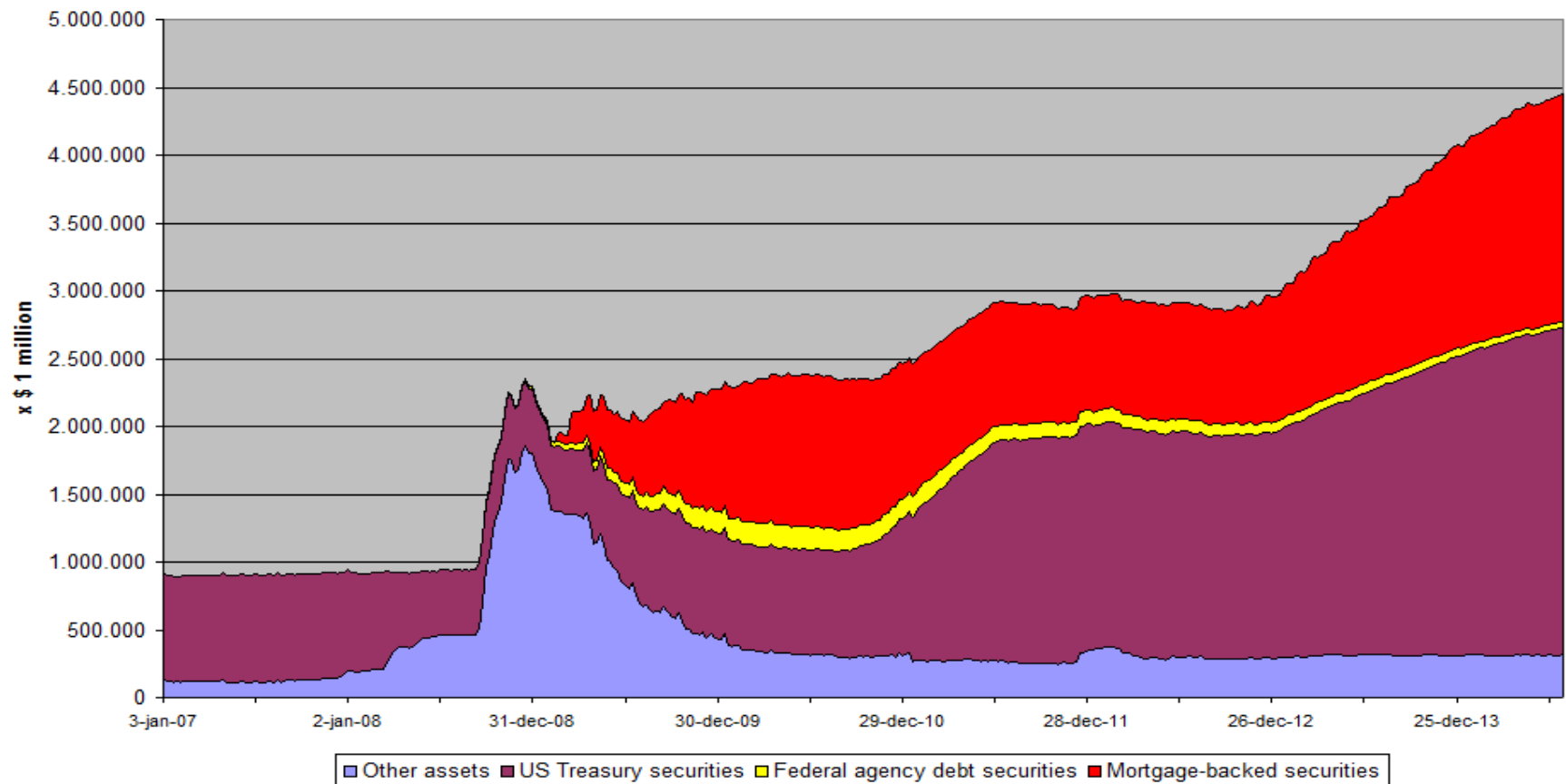


Per Capita GDP Rates in Asia (US \$) – India Needs to Step Forward!



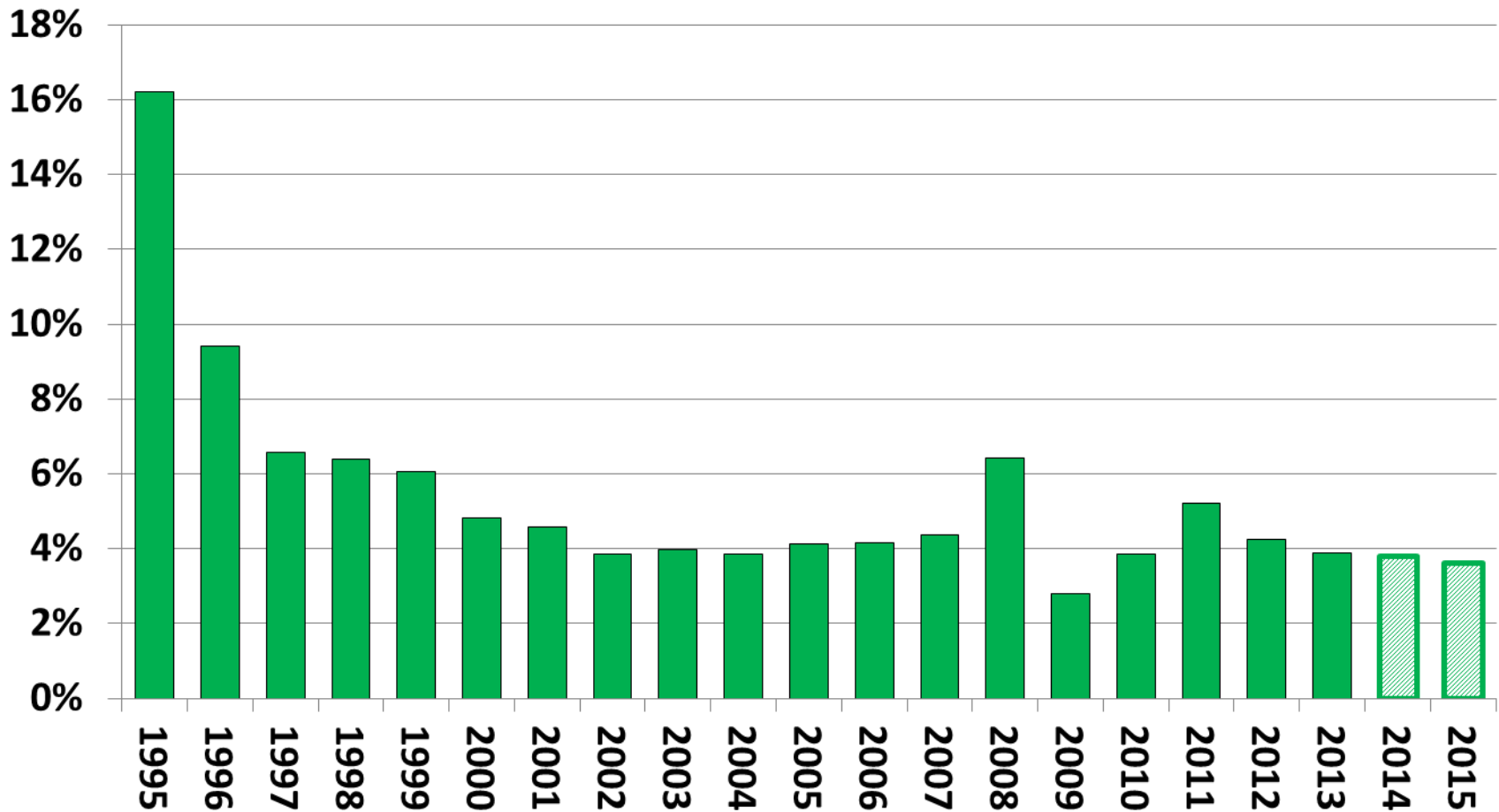
US Fed's Balance Sheet - \$4.5 Trillion – Reflate!

U.S. Federal Reserve balance sheet total



World Inflation

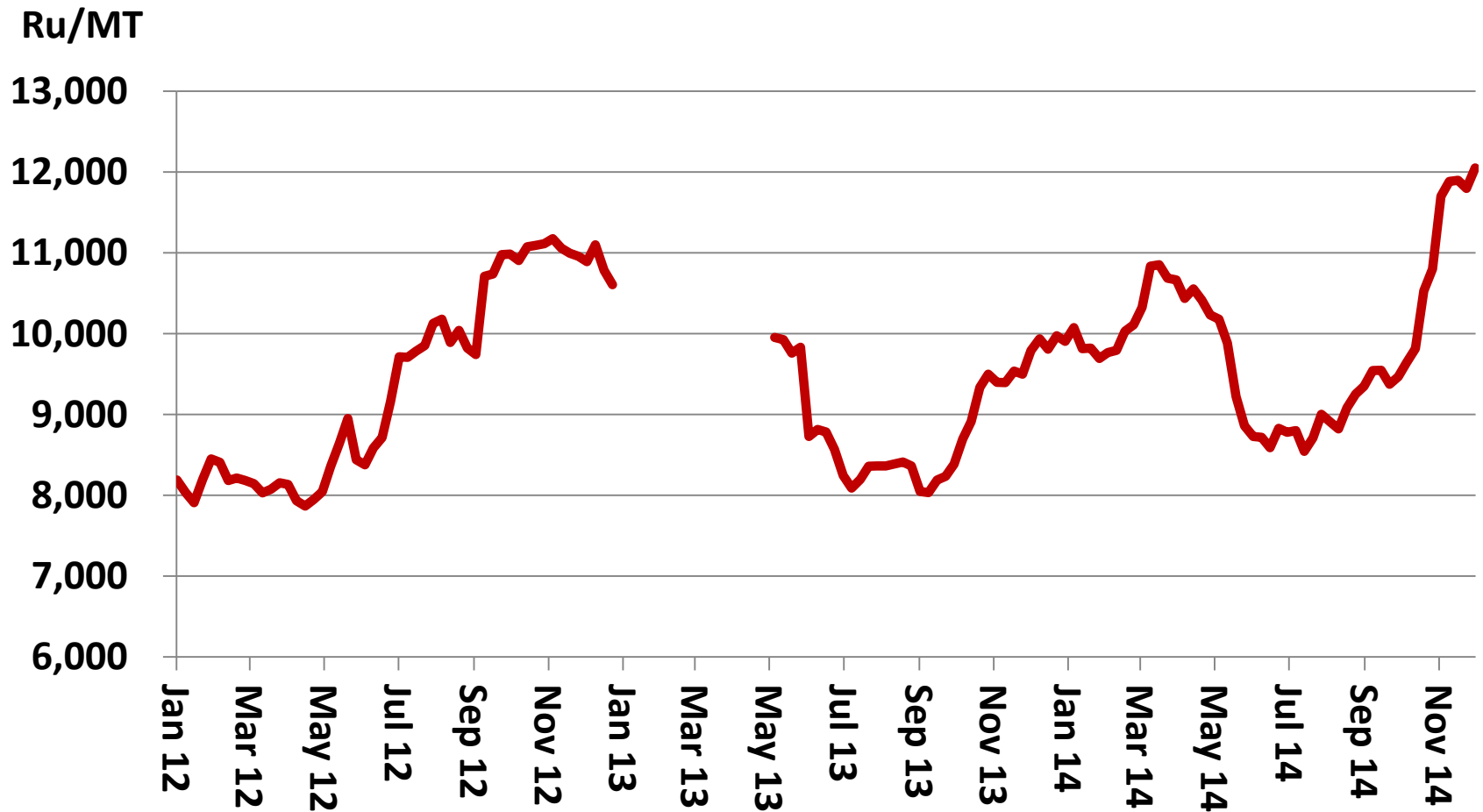
Annual % Change in Avg. Consumer Prices



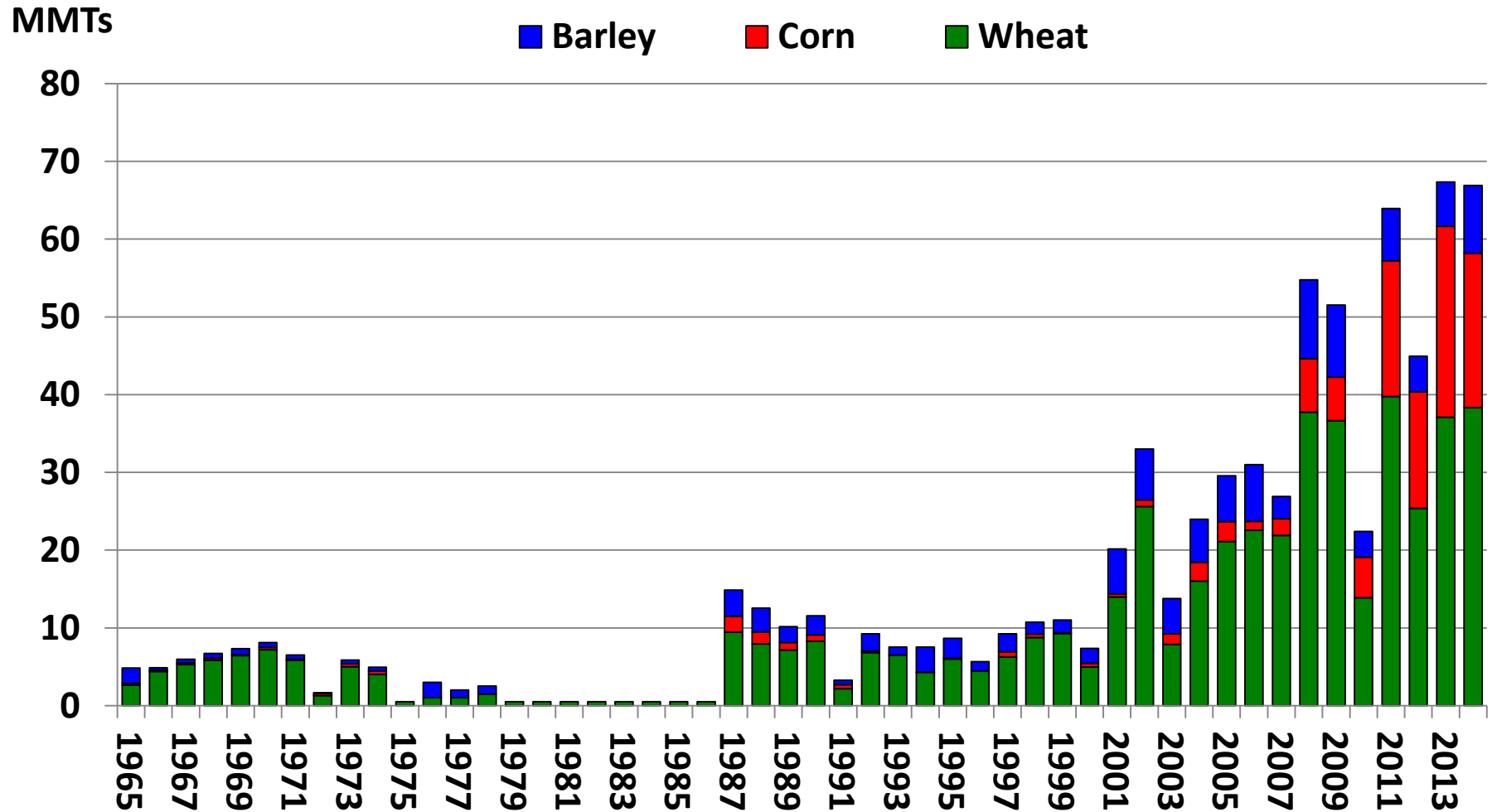
US Dollar Index



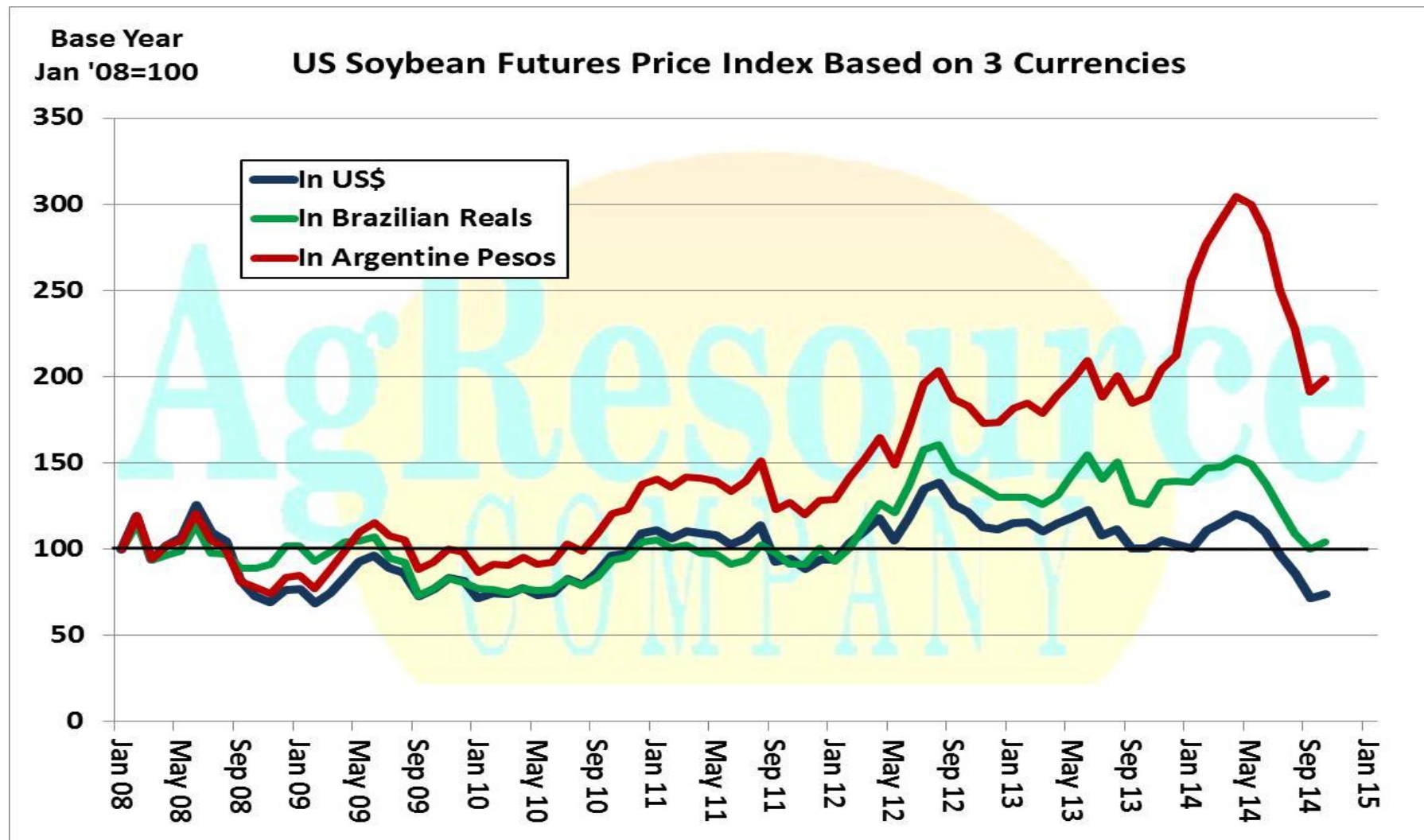
Russian Fob Wheat Prices in Rubles



FSU-12 Corn/Wheat/Barley Annual Exports



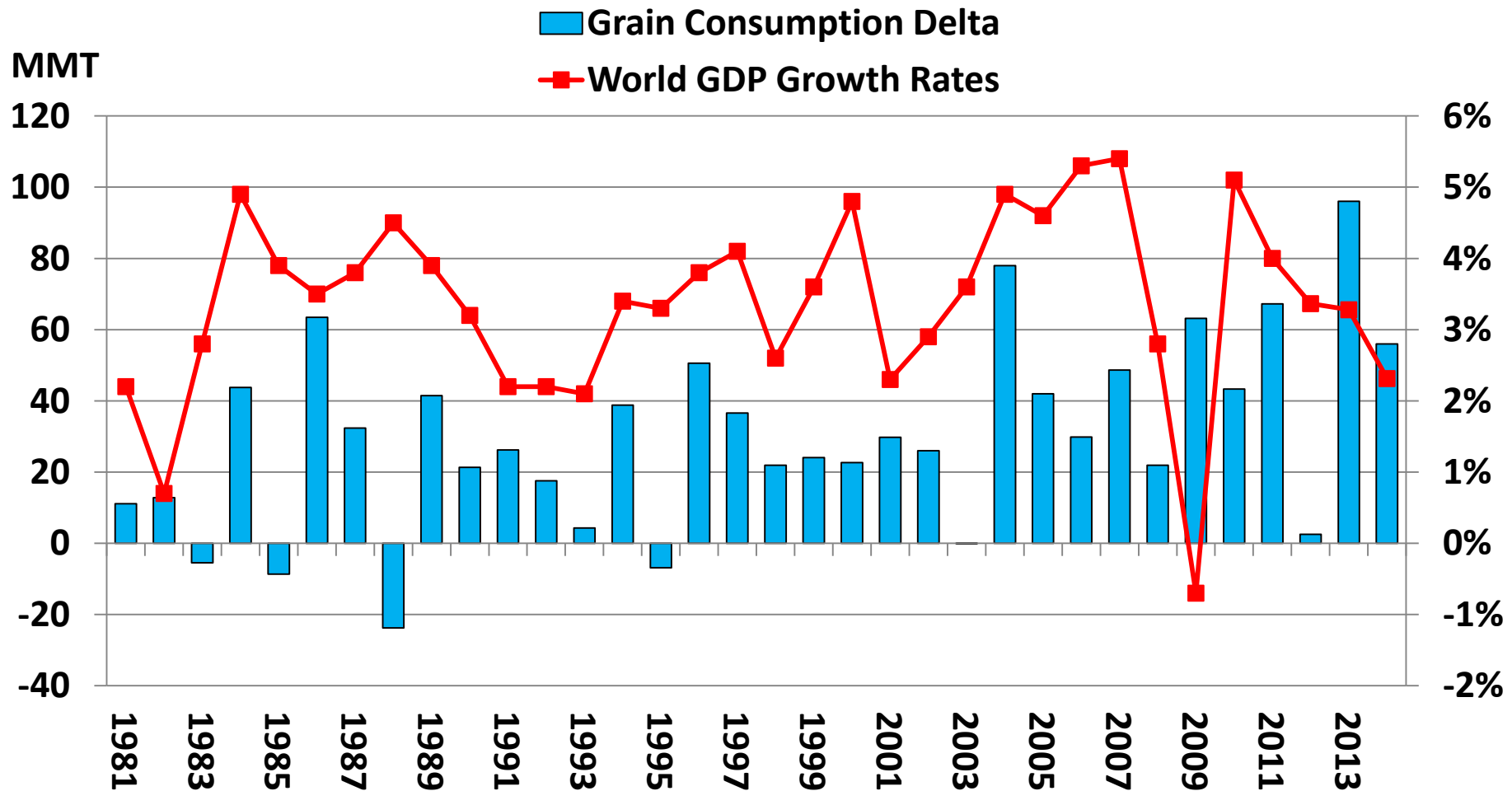
Soybeans In Brazilian Real/Argentine Peso Since 2008



World Grain 2014/15



World Corn, Soybean & Wheat Consumption Delta vs. World GDP Growth Rate

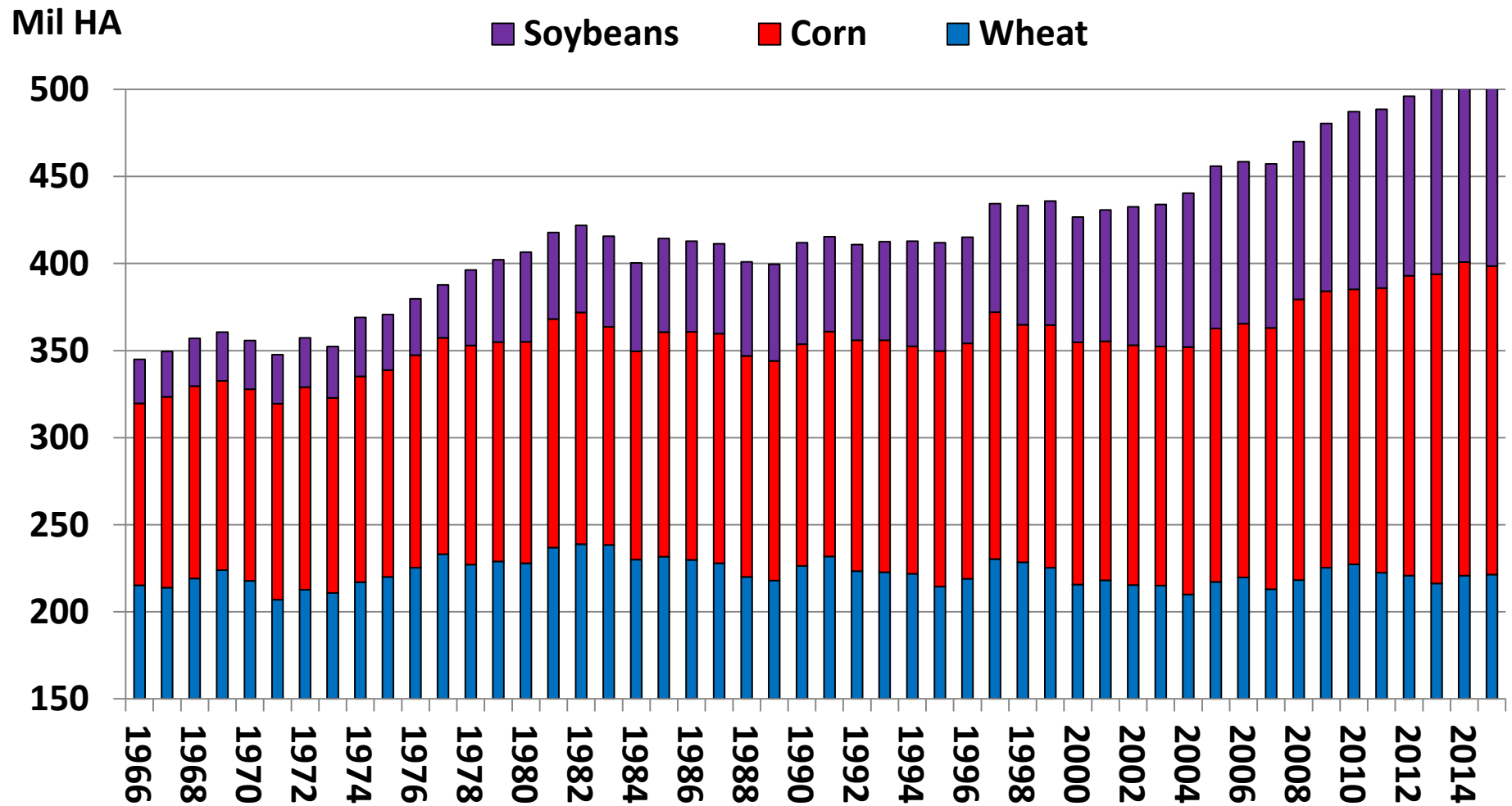


World Grain Area and Production in 2014/15

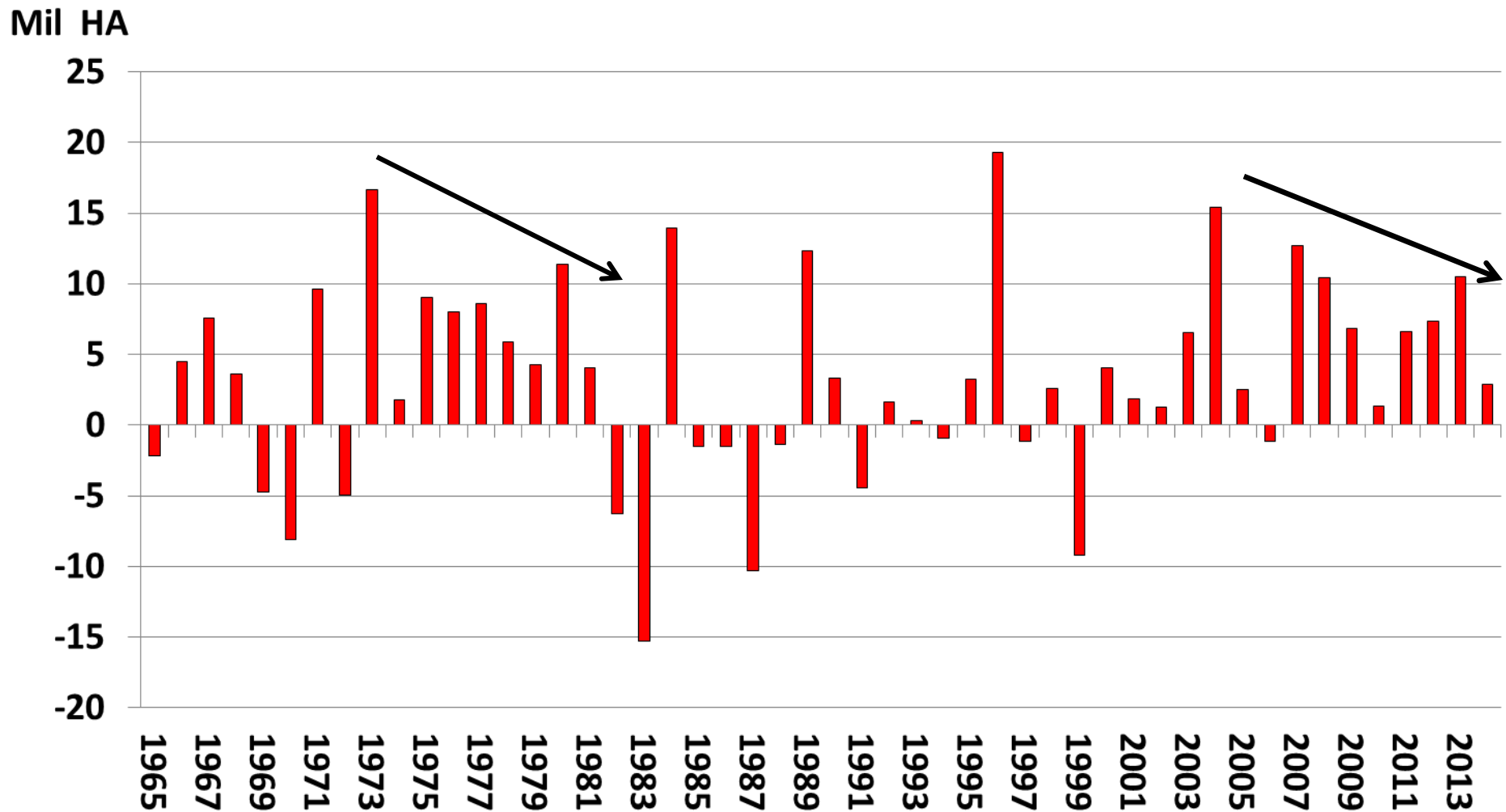


Area (Mil HA)	2012	2013	2014	Change	5 Yr Avg
Total	444.0	451.4	447.5	- 3.9	441.0 ▲
Wheat	216.3	220.8	221.4	+ 0.6	220.0 ▲
Corn	177.6	180.0	177.2	- 2.8	170.6 ▲
Barley	50.2	50.6	48.9	- 1.7	50.3
Production (MMTs)	2012	2013	2014	Change	5 Yr Avg
Total	1,656.8	1,849.2	1,849.9R	+0.8	1,699.6 ▲
Wheat	657.9	714.7	719.9R	+5.1	681.4 ▲
Corn	868.0	989.2	990.3R	+1.1	881.6 ▲
Barley	129.8	145.3	139.8	-5.5	136.6 ▲

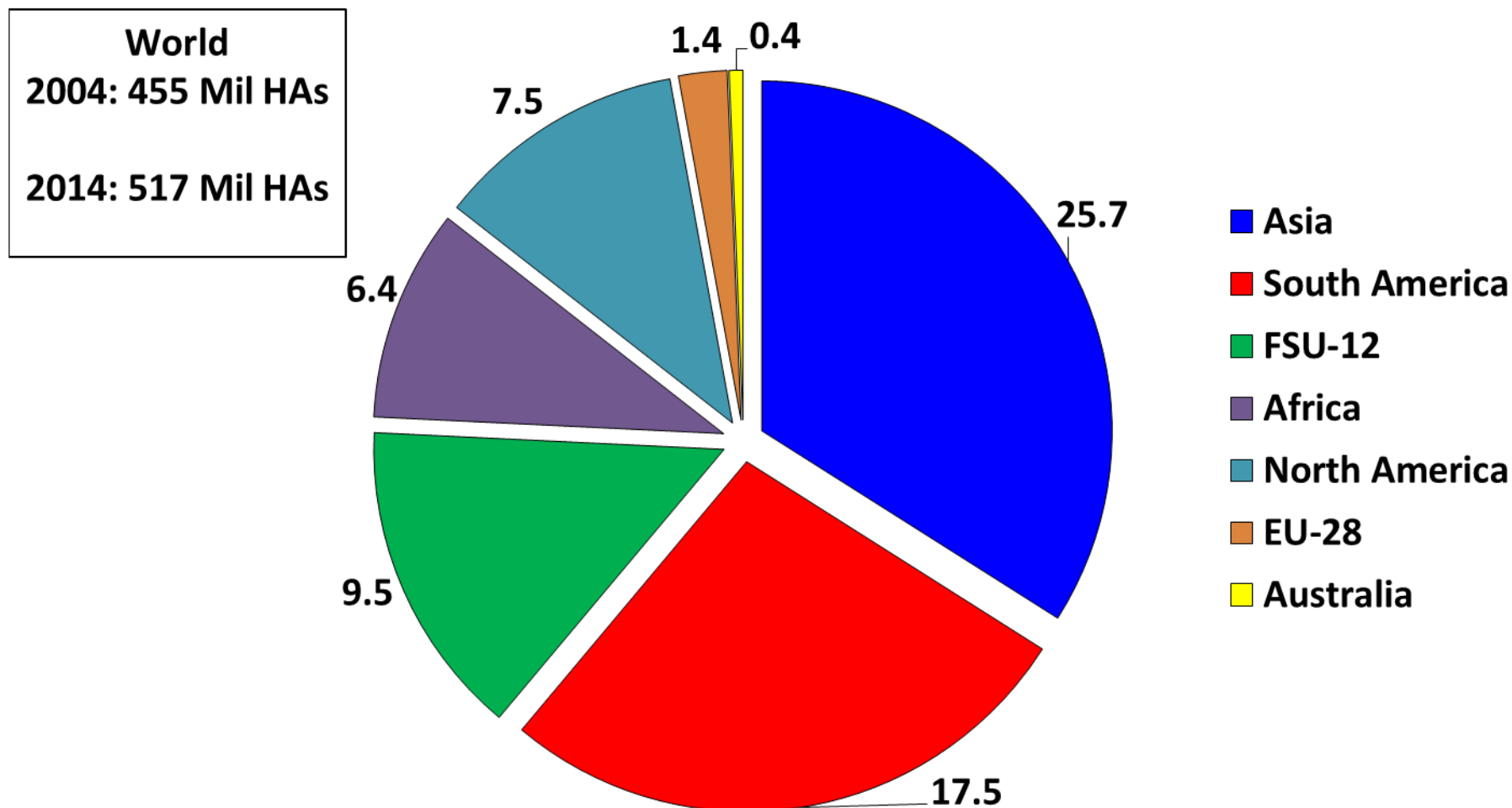
2014 Global Area Harvested: 517 Mil HA— up 2.4 Mil HA (5.8 Mil acres)



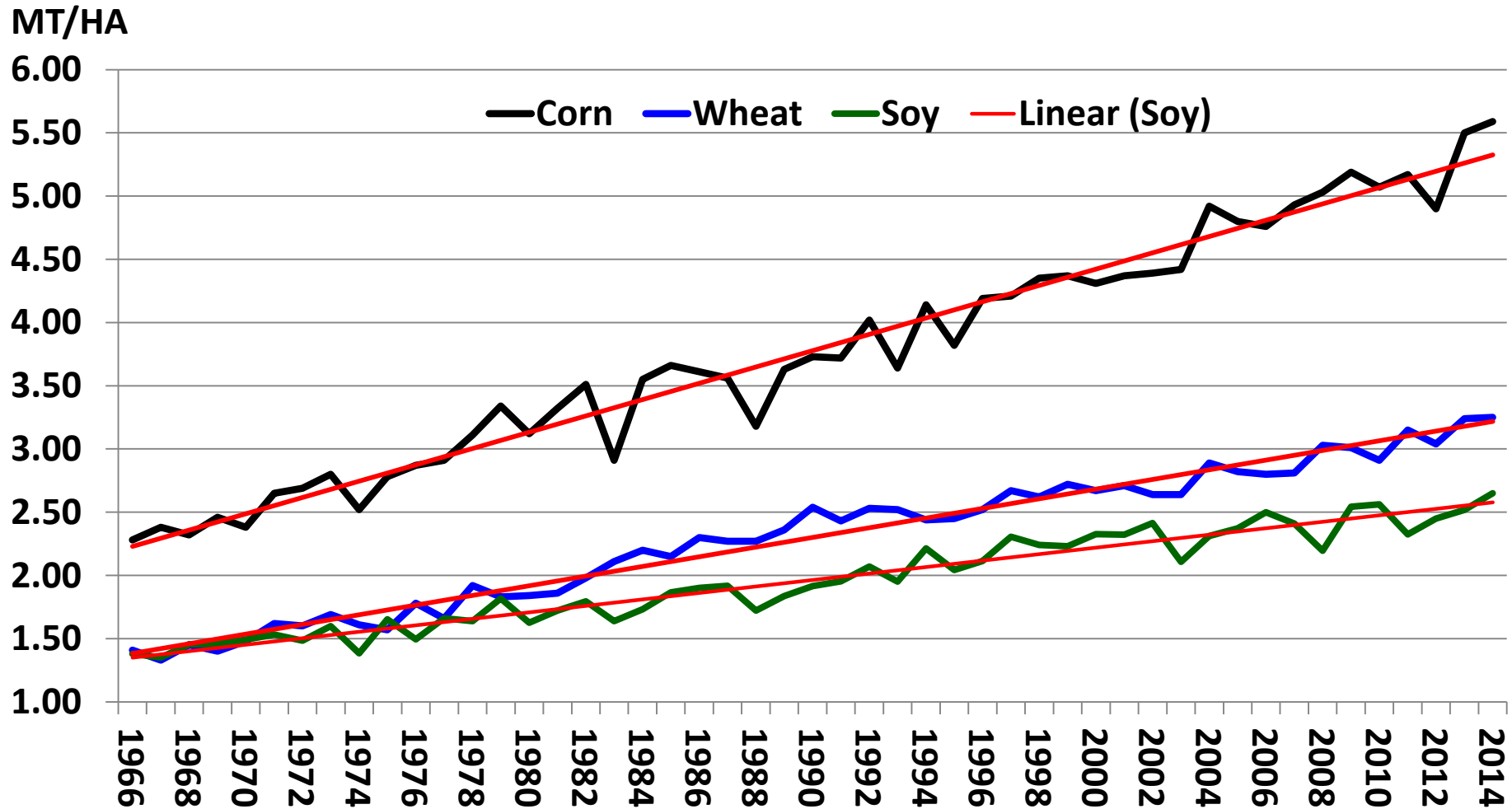
Delta in Global Harvested Area – 9 Years of Growth between 1972-1981 - 8 Years to date via 2014



2004–14 Change in Harvested Major Grains: Up 72 Mil HA or 175 Mil Acres

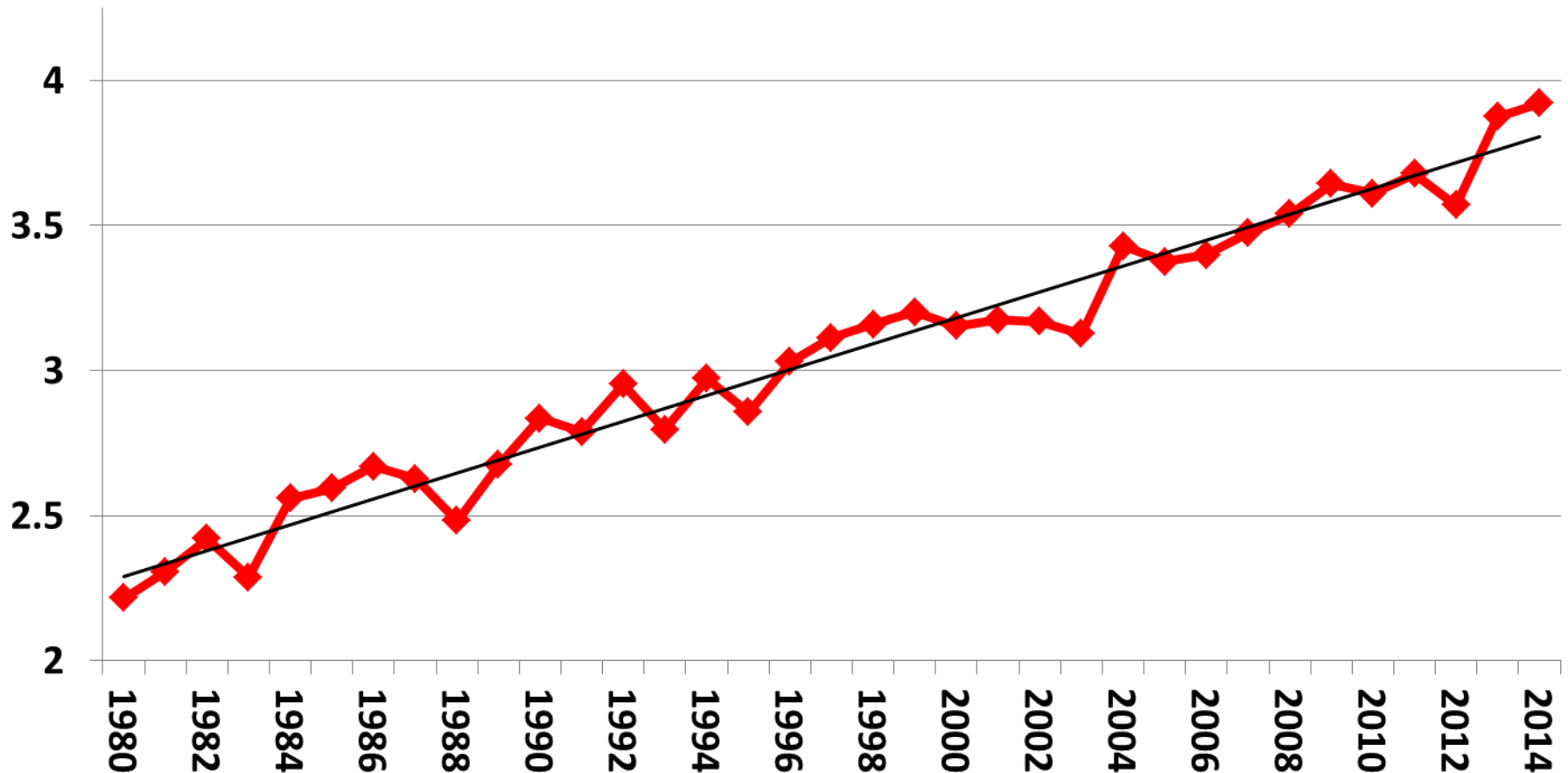


World Major Crop Trend Yields 3.92 MT/HA Weighted Area Basis



There have been years in which adverse weather impacts world crop yields!

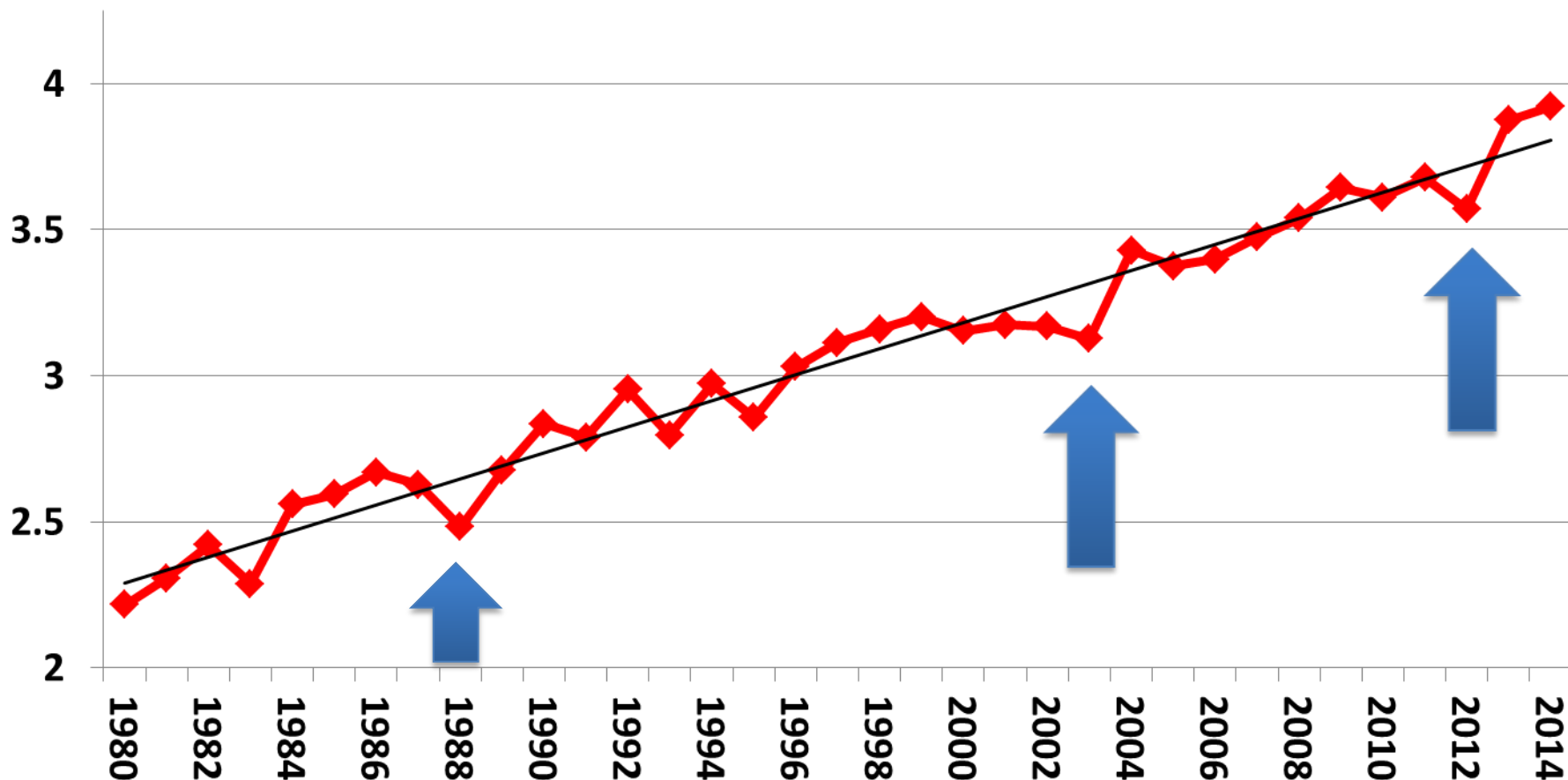
MT/HA



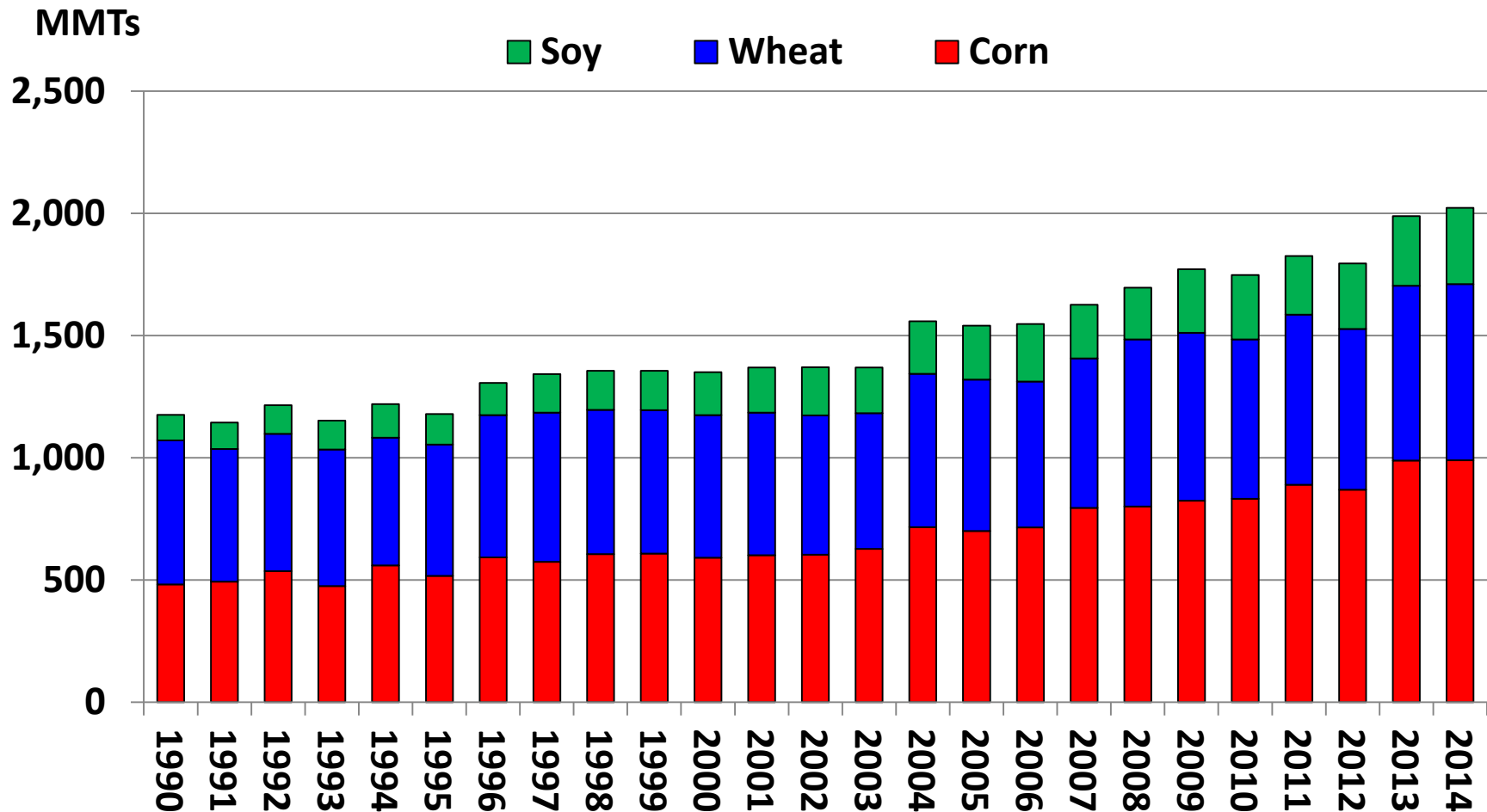
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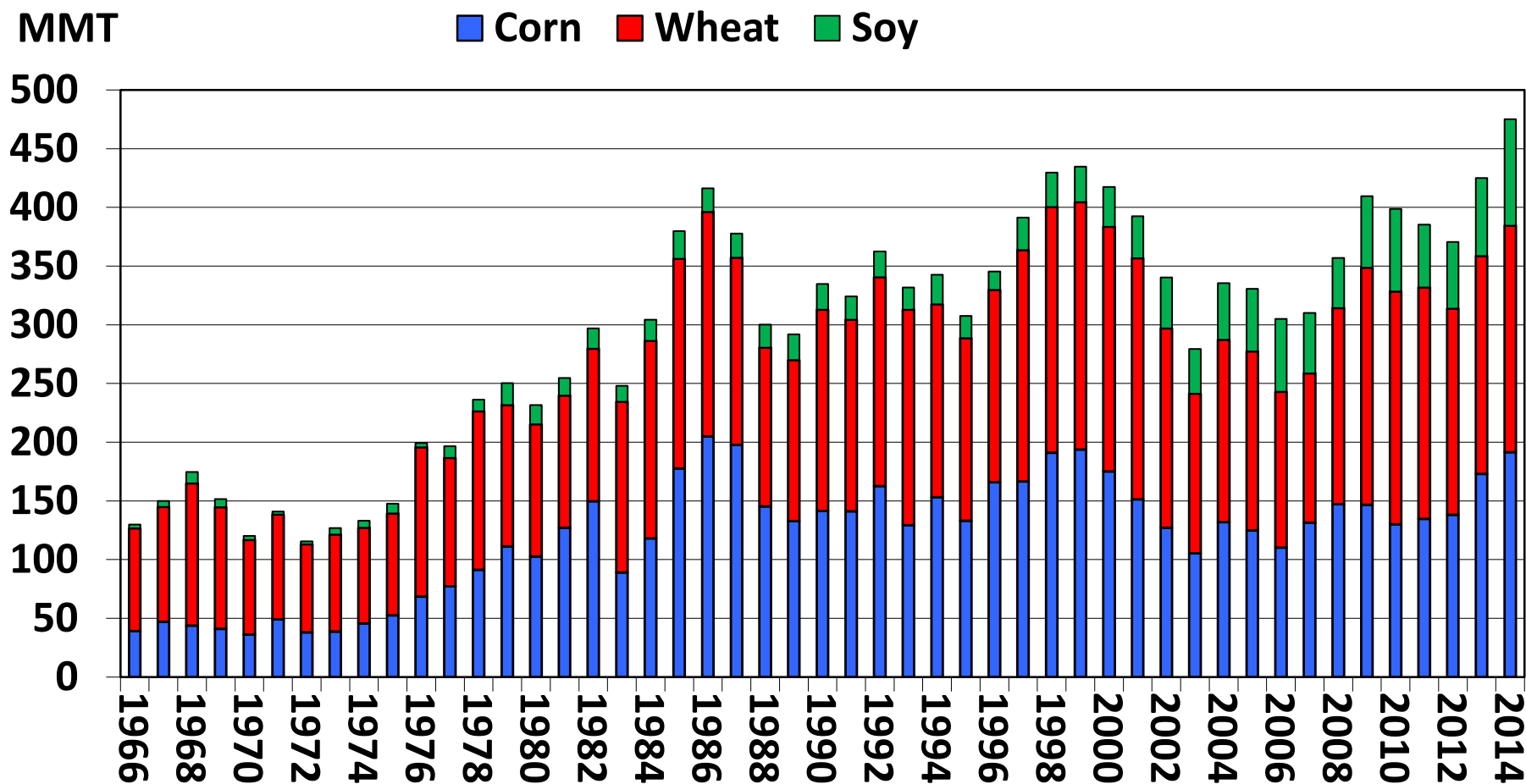
MT/HA



Global Corn, Wheat, Soy Production to Rise to Record 2,022 MMTs

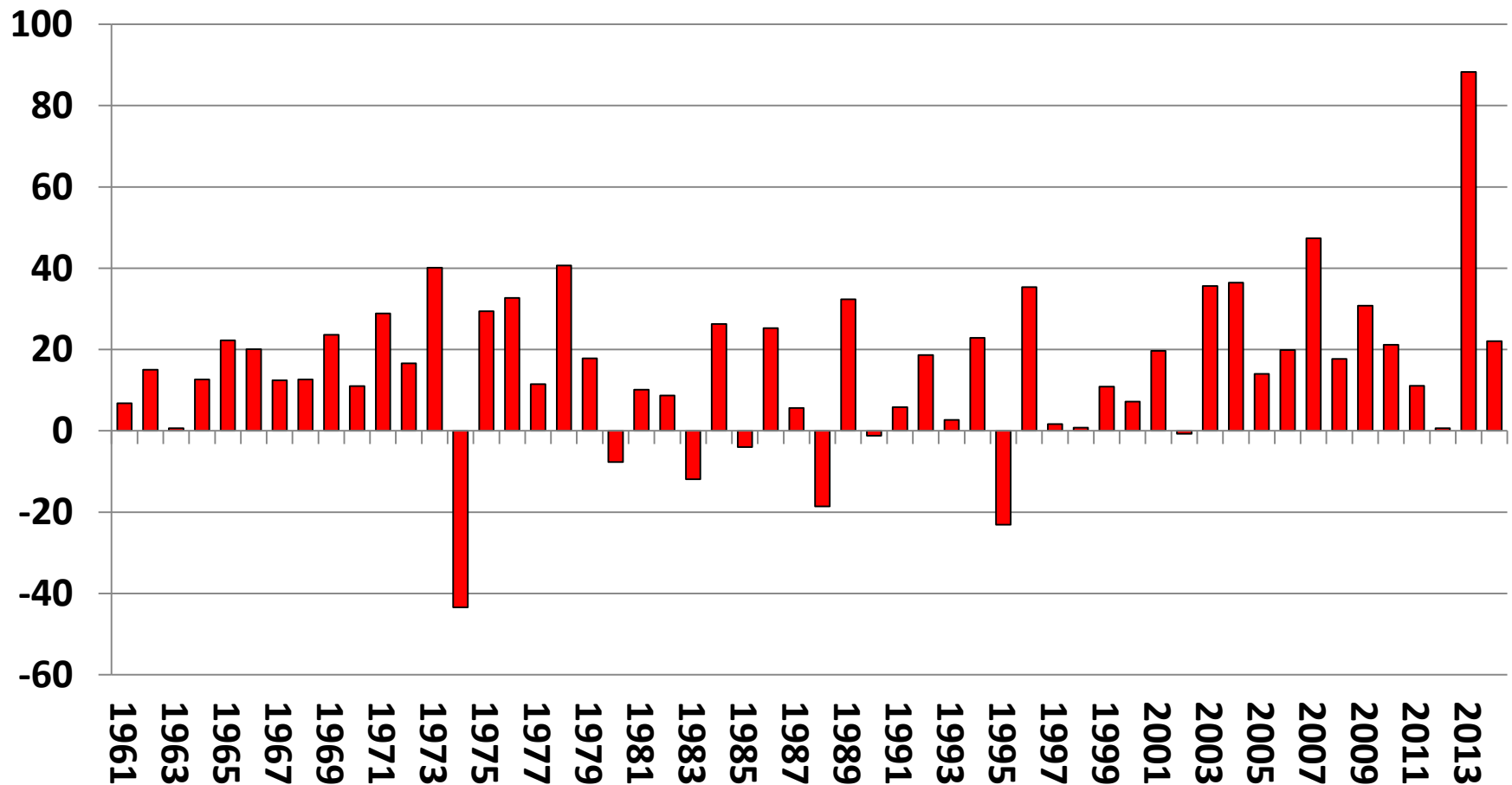


2014/15 World Grain Stocks – Record Large



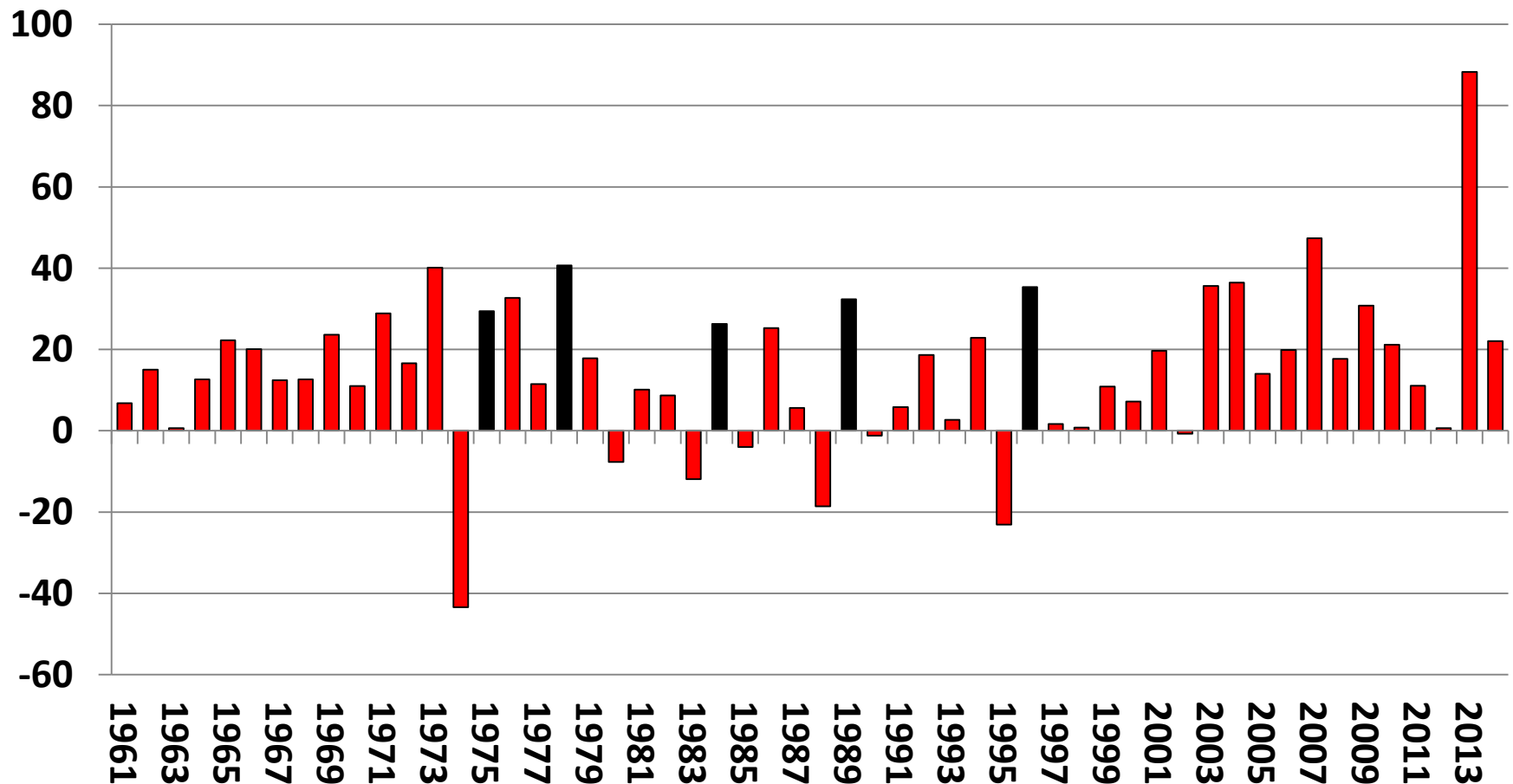
Year-on-Year Difference on World Coarse Grain Demand since 1988

MMTs



Year-on-Year Difference on World Coarse Grain Demand since 1988

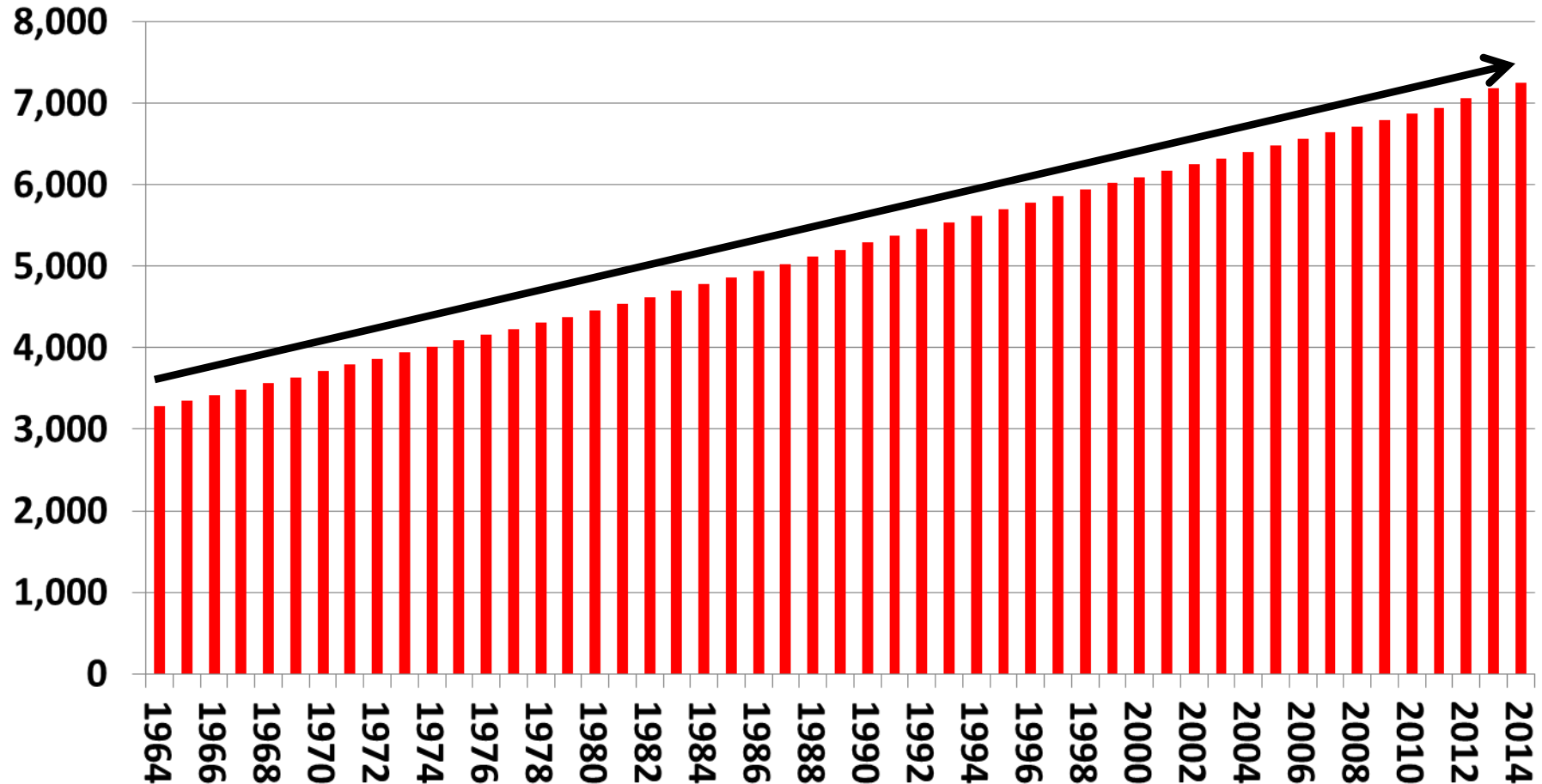
MMTs



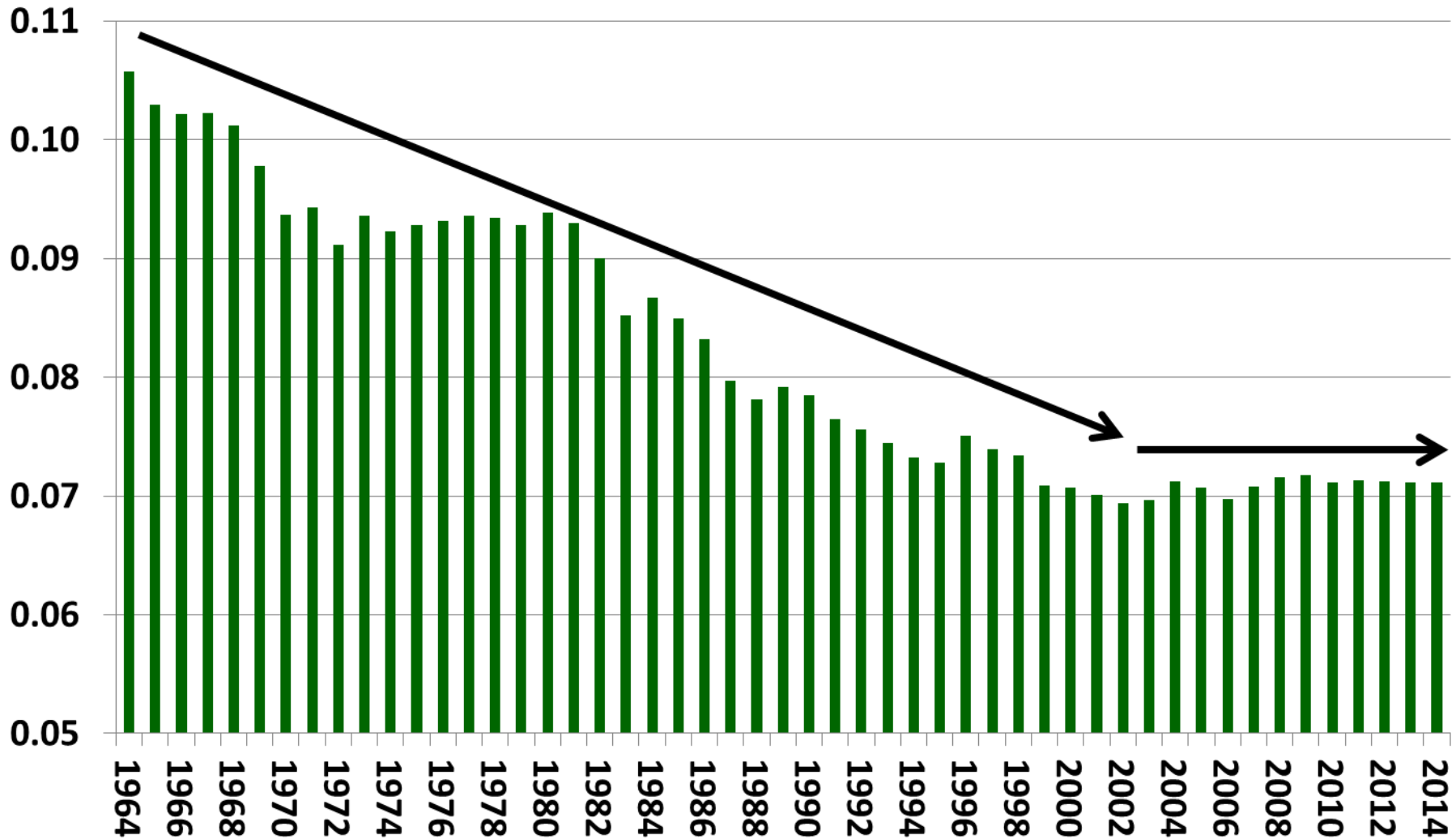
World Population – 7.25 Billion!



Mil Persons

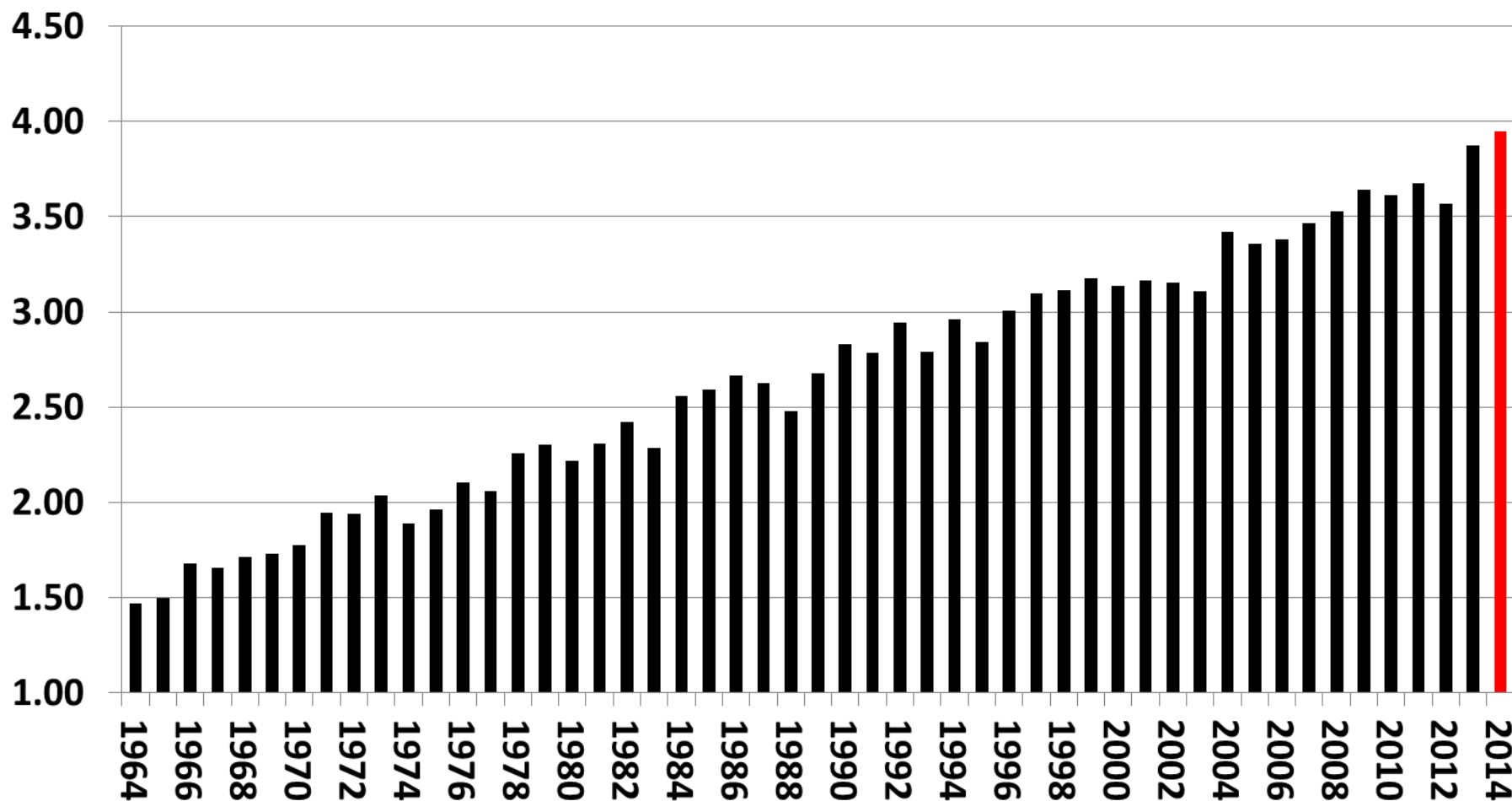


Global Per Capita Harvested Ag Hectares



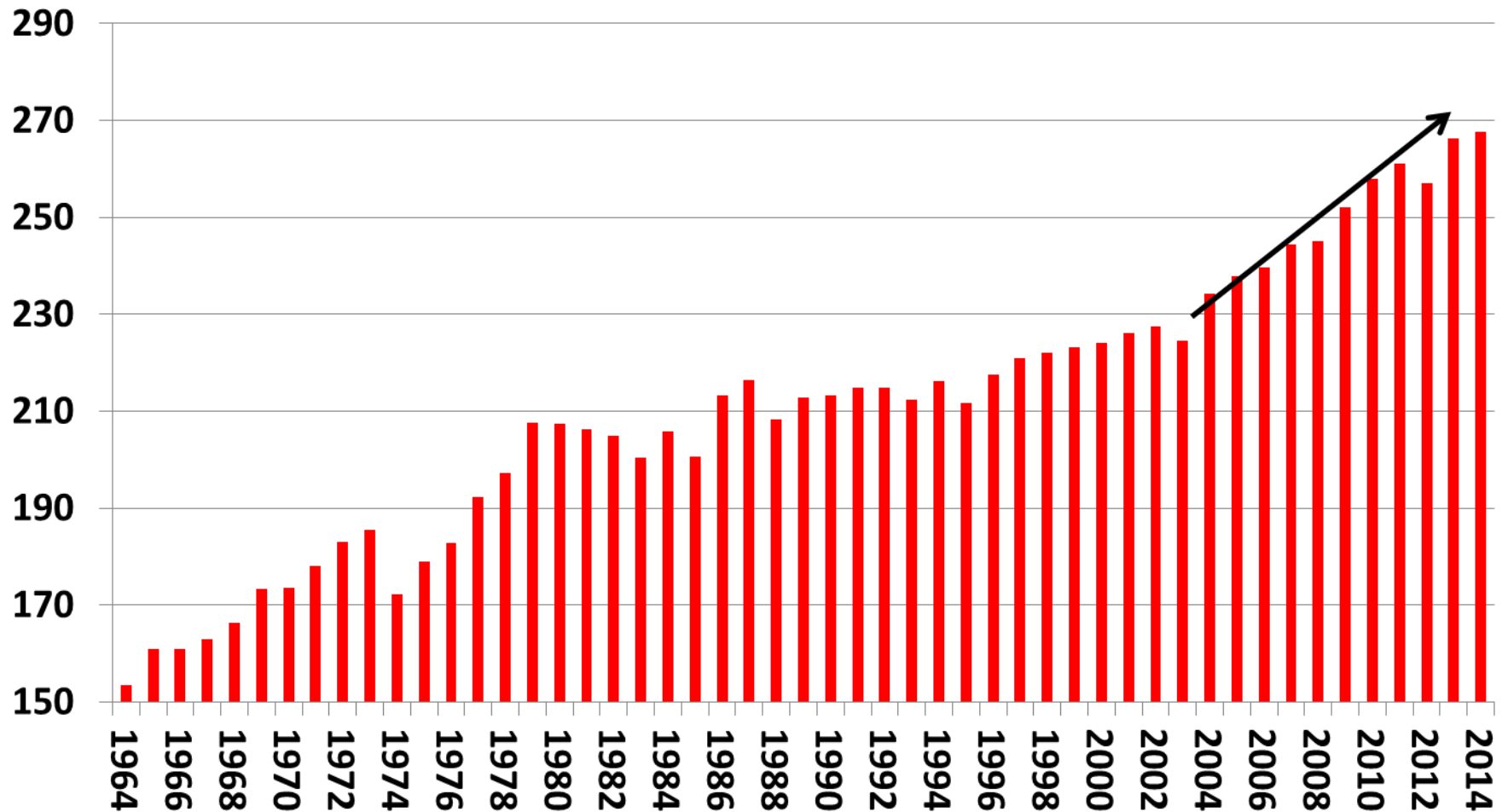
Global Coarse Grain, Wheat, and Oilseed Yield Rise!

MTs/HA



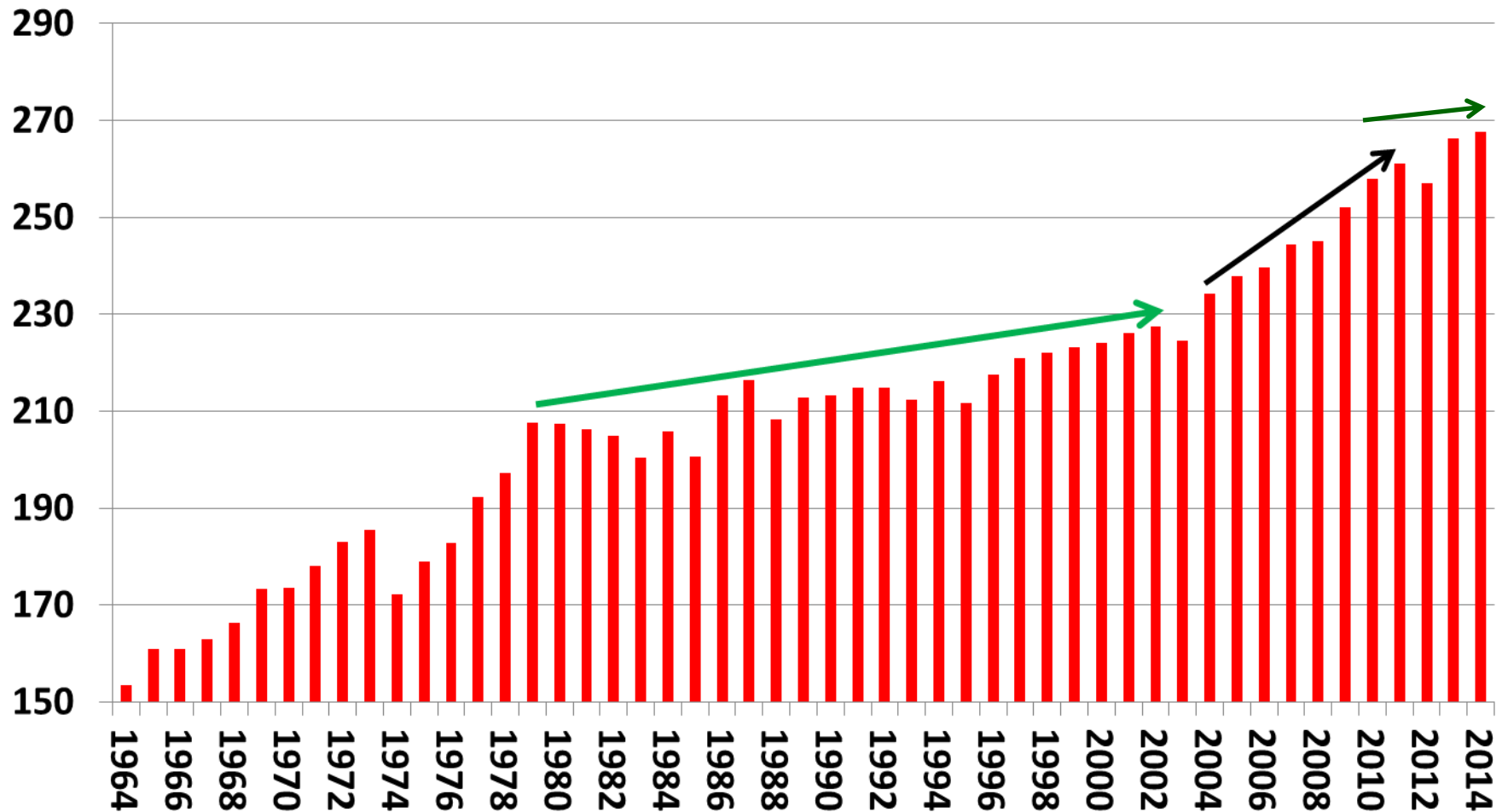
Global Per Capita Corn, Wheat and Soy Demand

Kg/Capita

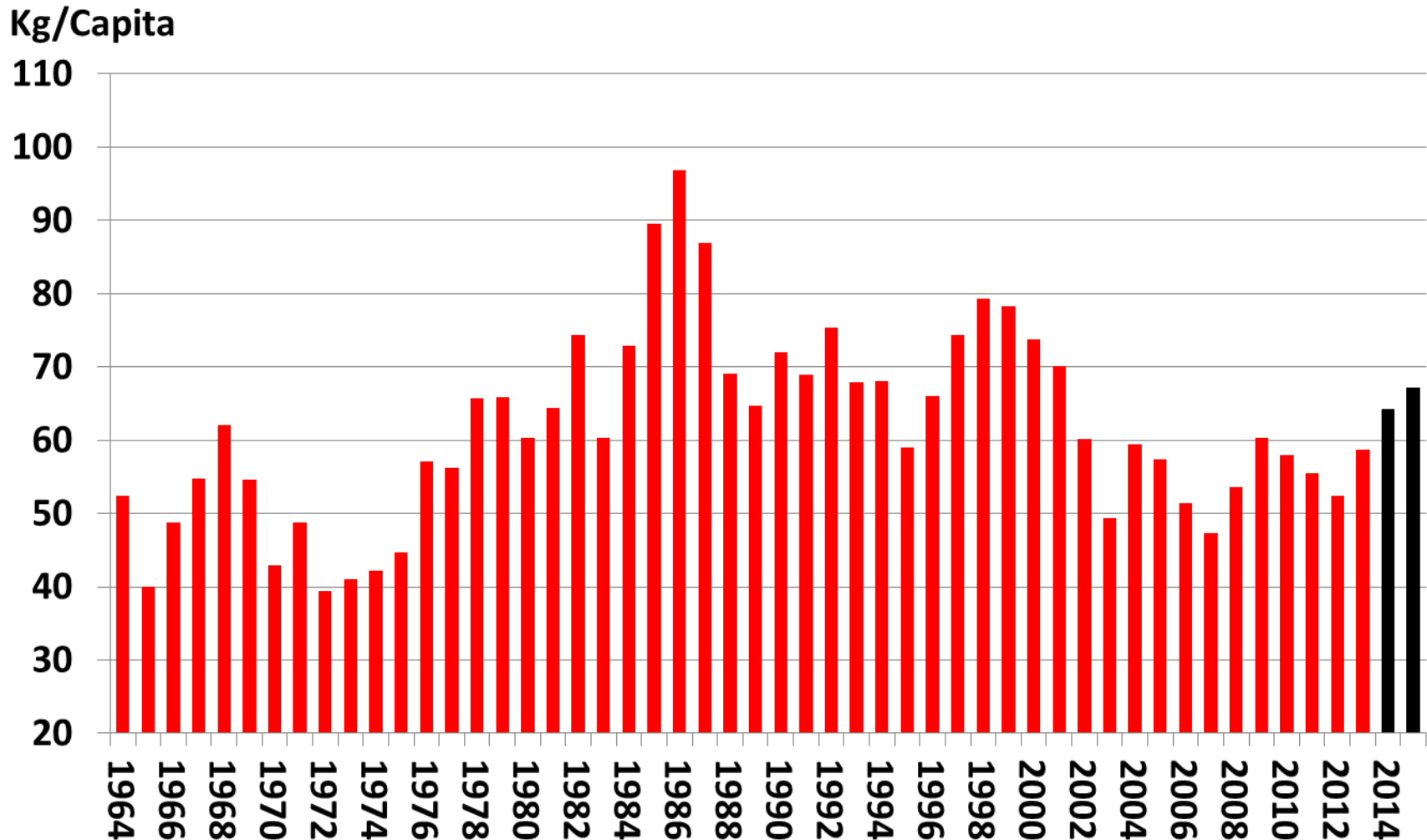


Global Per Capita Corn, Wheat and Soy Demand

Kg/Capita

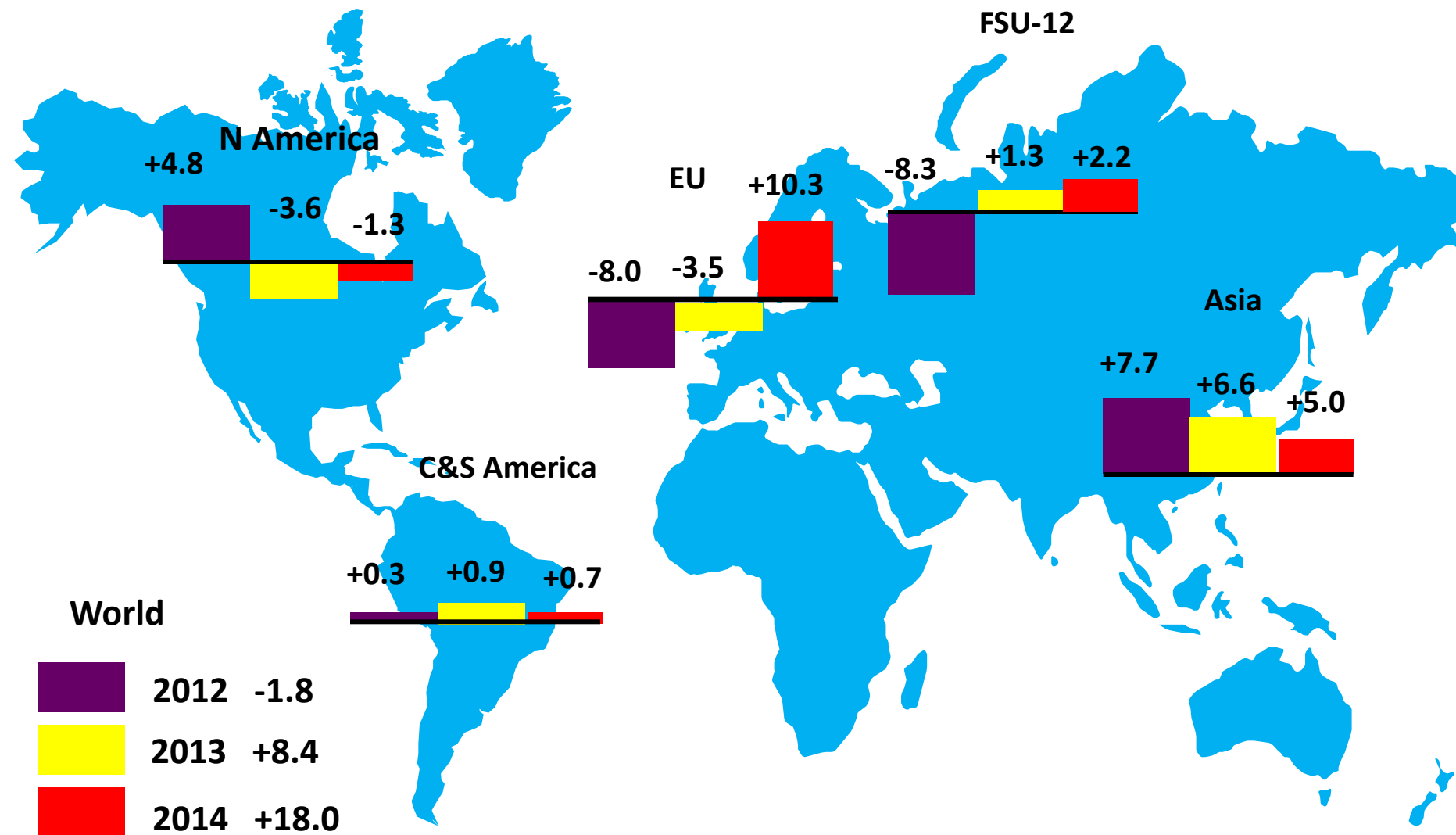


2014 Global Per Capita Grain and Oilseed Stocks – Largest since 2001!

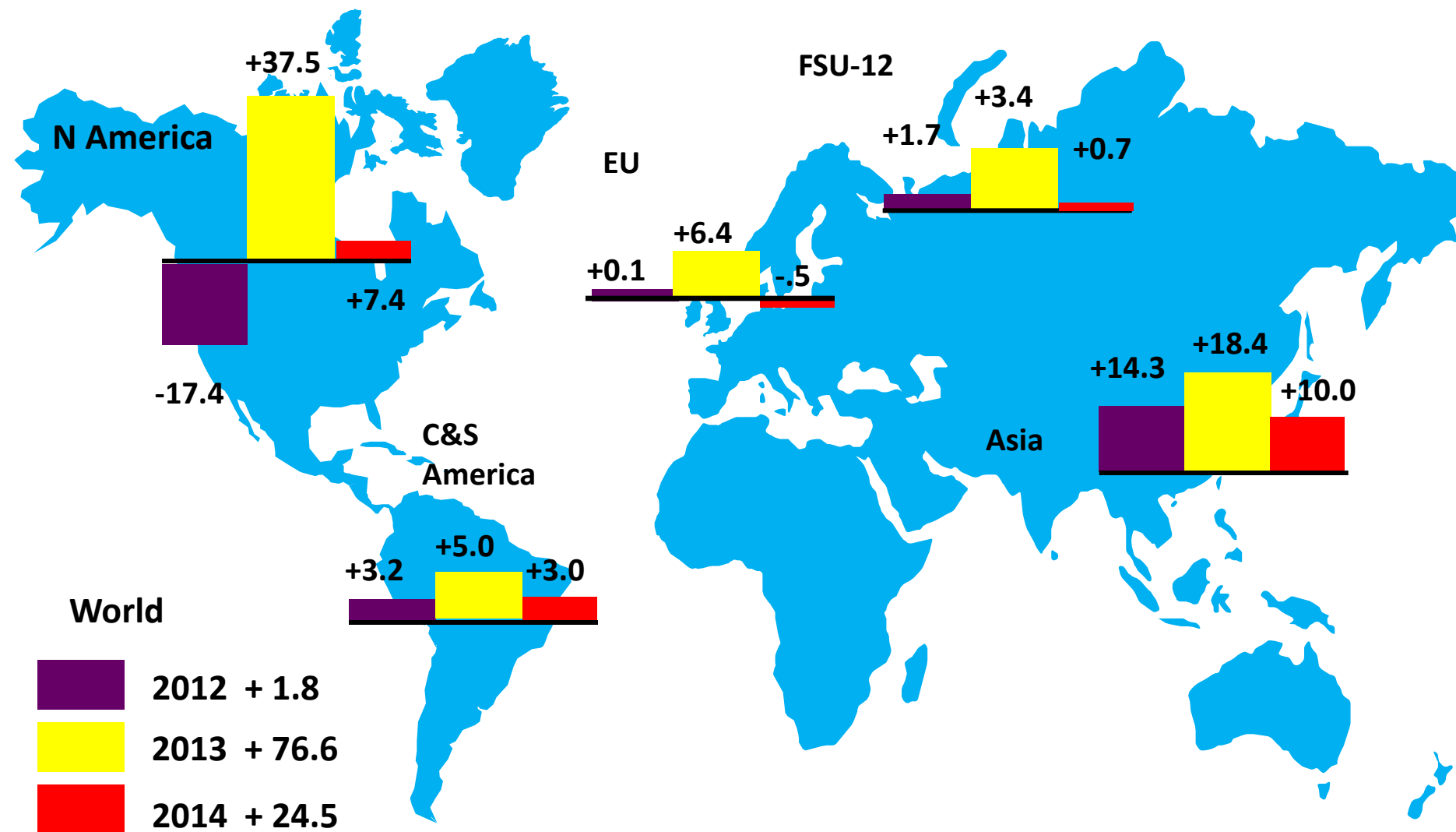


Delta in World Wheat Demand (MMTs)

2012-2014



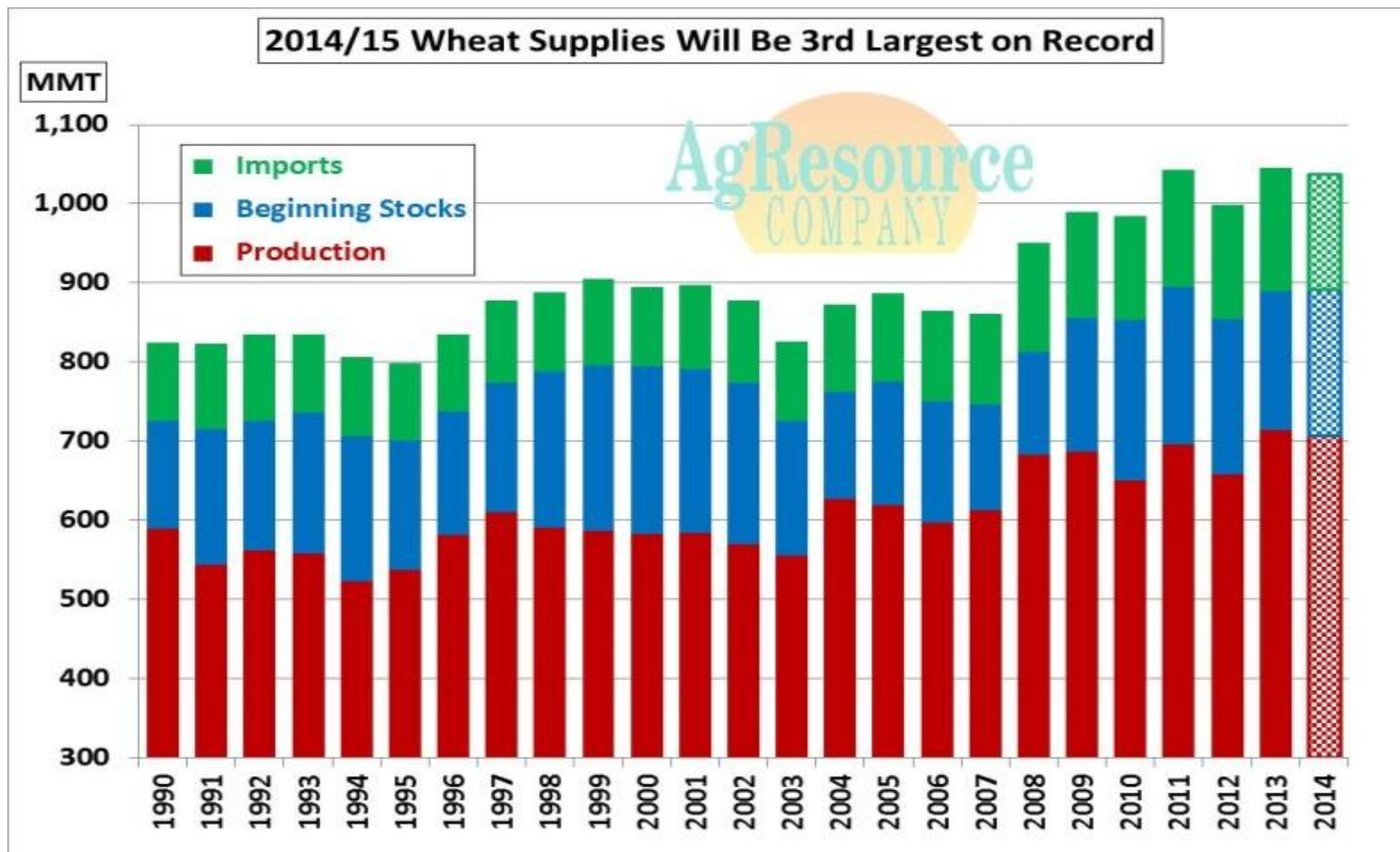
Delta in World Corn Demand (MMTs) 2012-2014



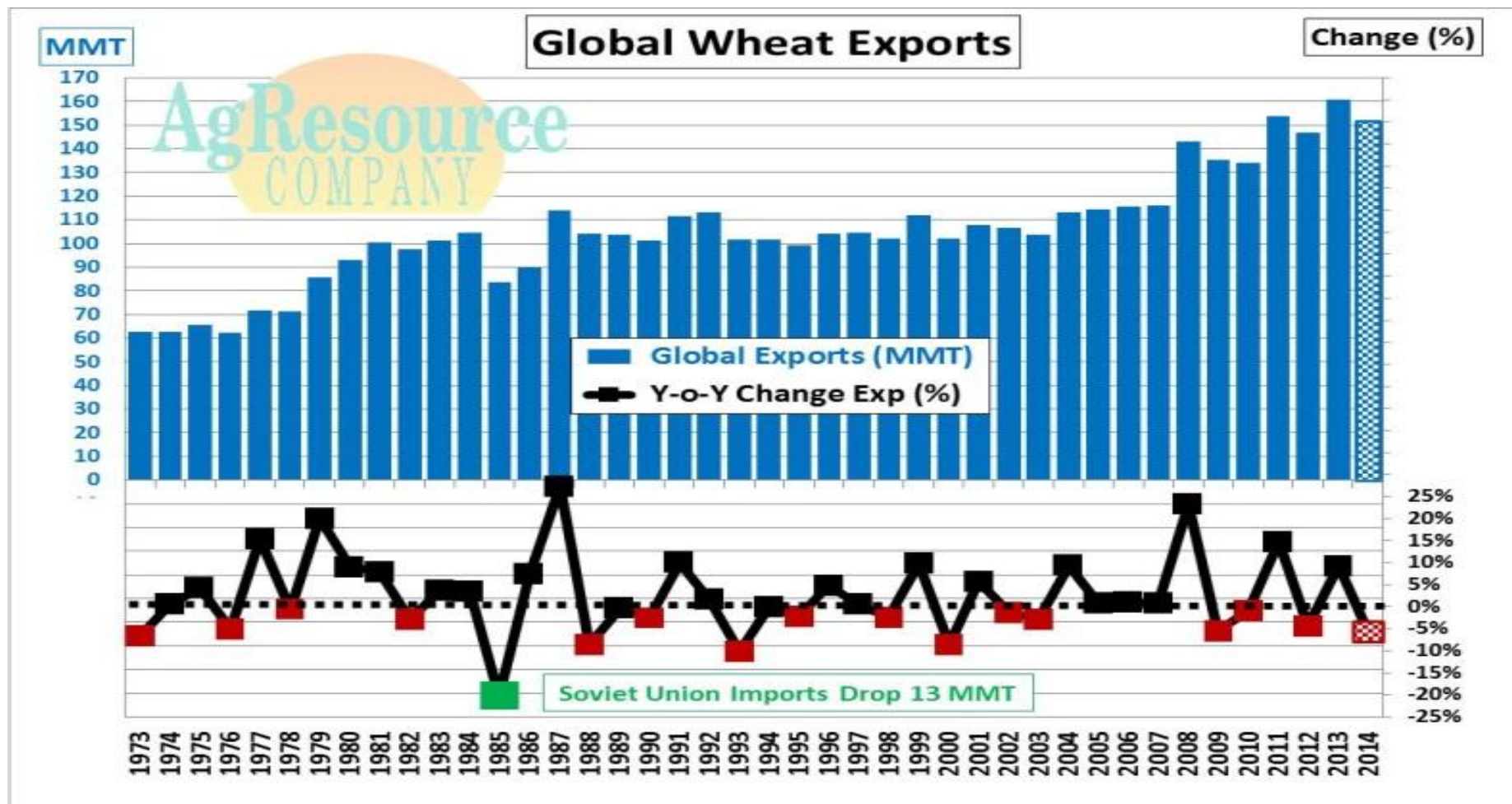
The World Wheat Outlook – Exportable Supplies and Stale Trade Demand



Big World Wheat Crop – Reduced Demand spells Bearish Trend

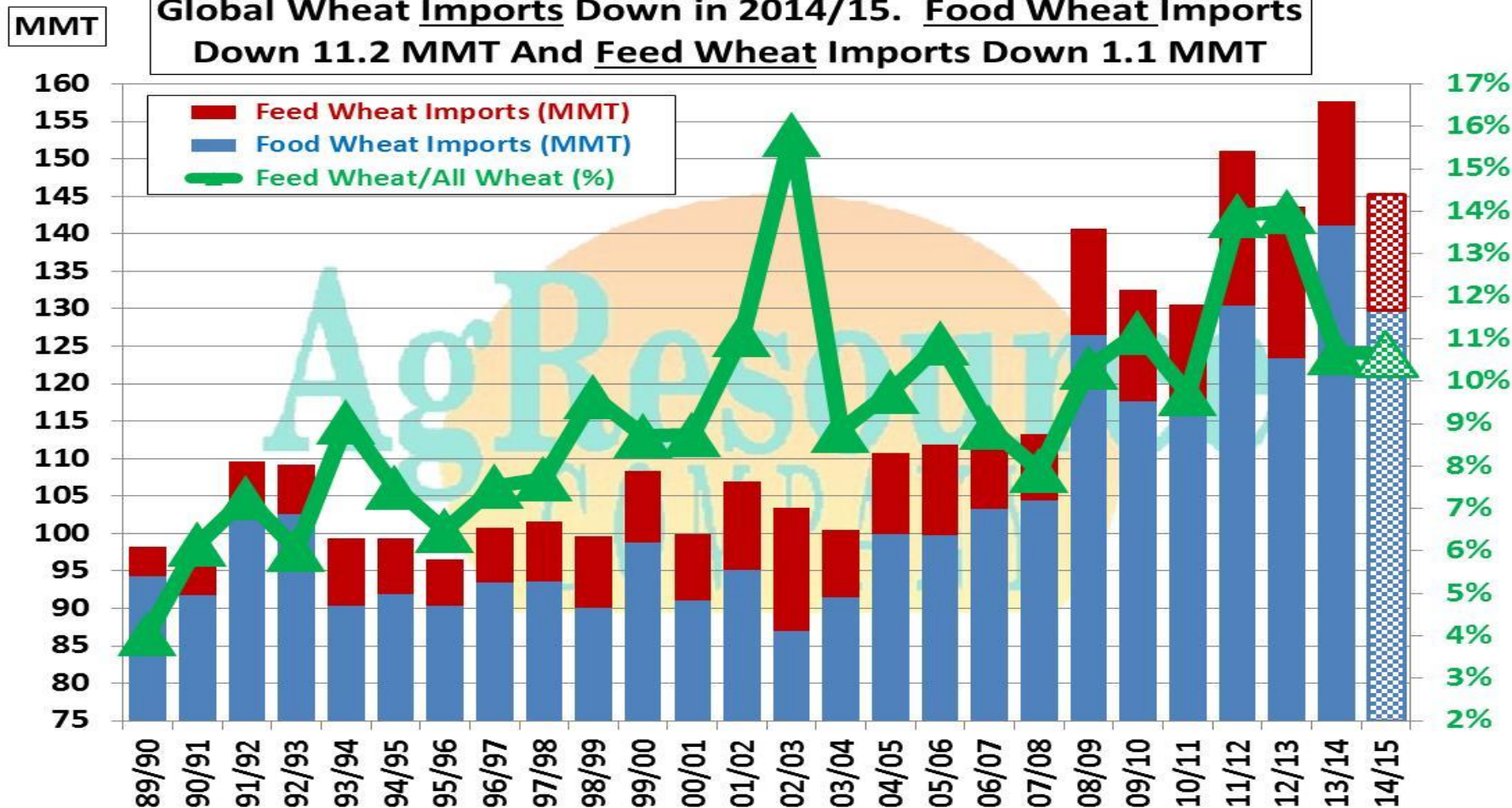


Global Wheat Lacks a Demand Driver with exports off 2%!



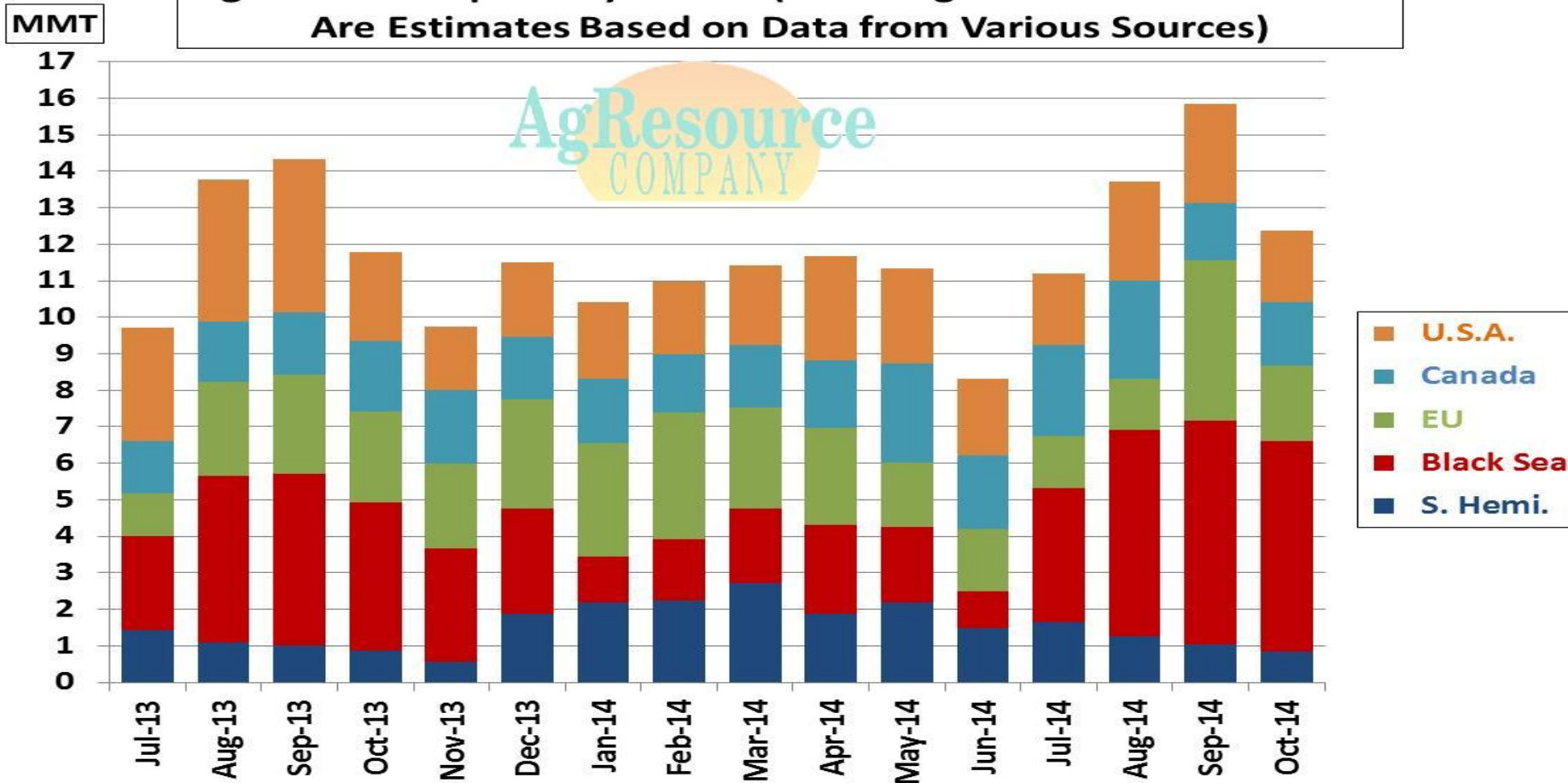
Global Wheat Imports Down 11-12 MMTs on Food

Global Wheat Imports Down in 2014/15. Food Wheat Imports Down 11.2 MMT And Feed Wheat Imports Down 1.1 MMT

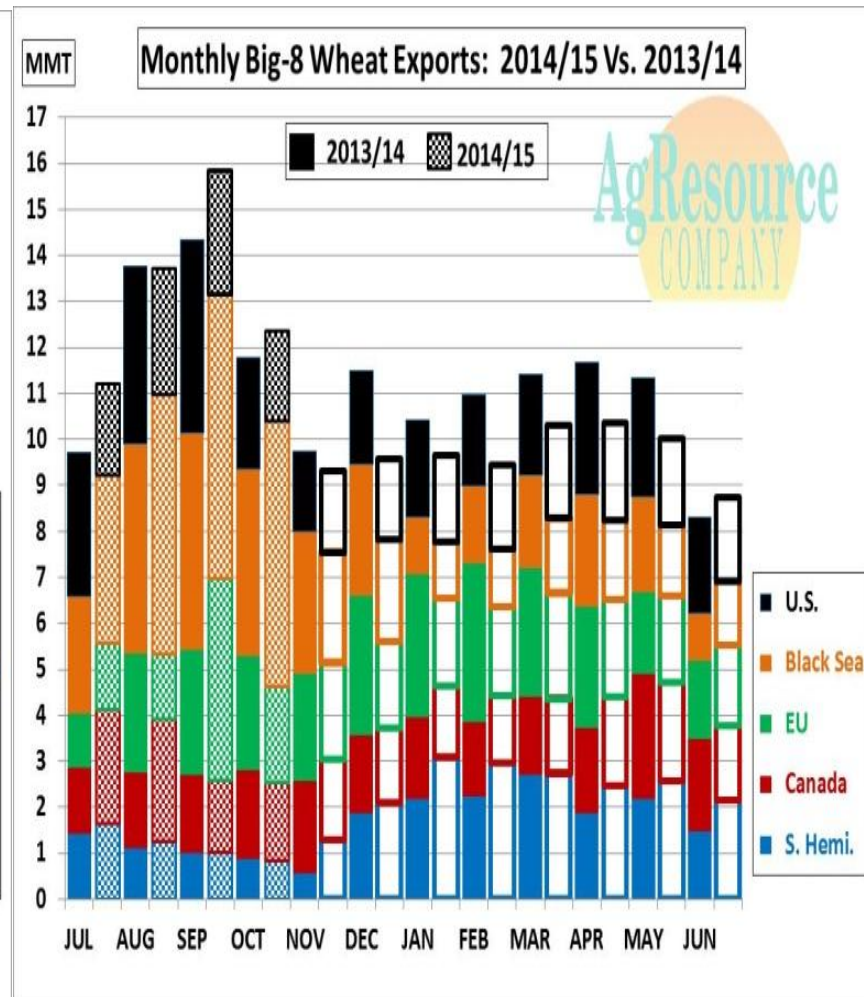
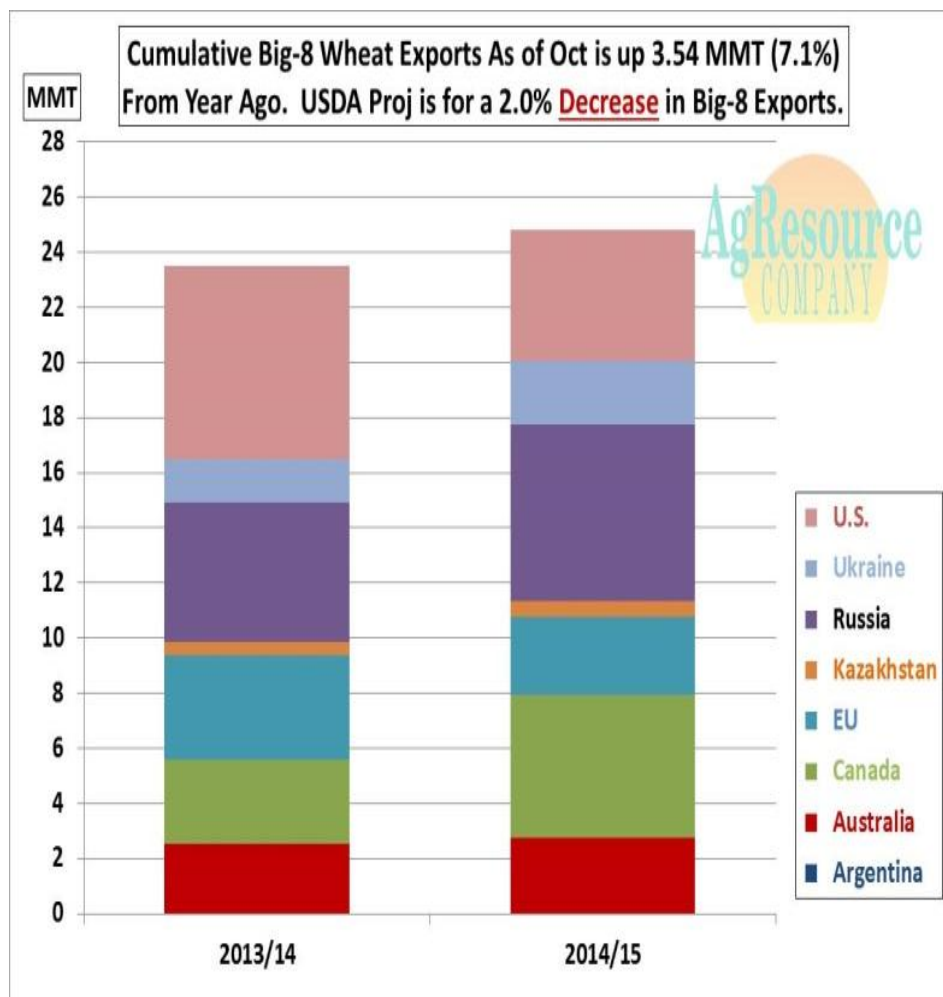


World Wheat Export demand was strong in September and October

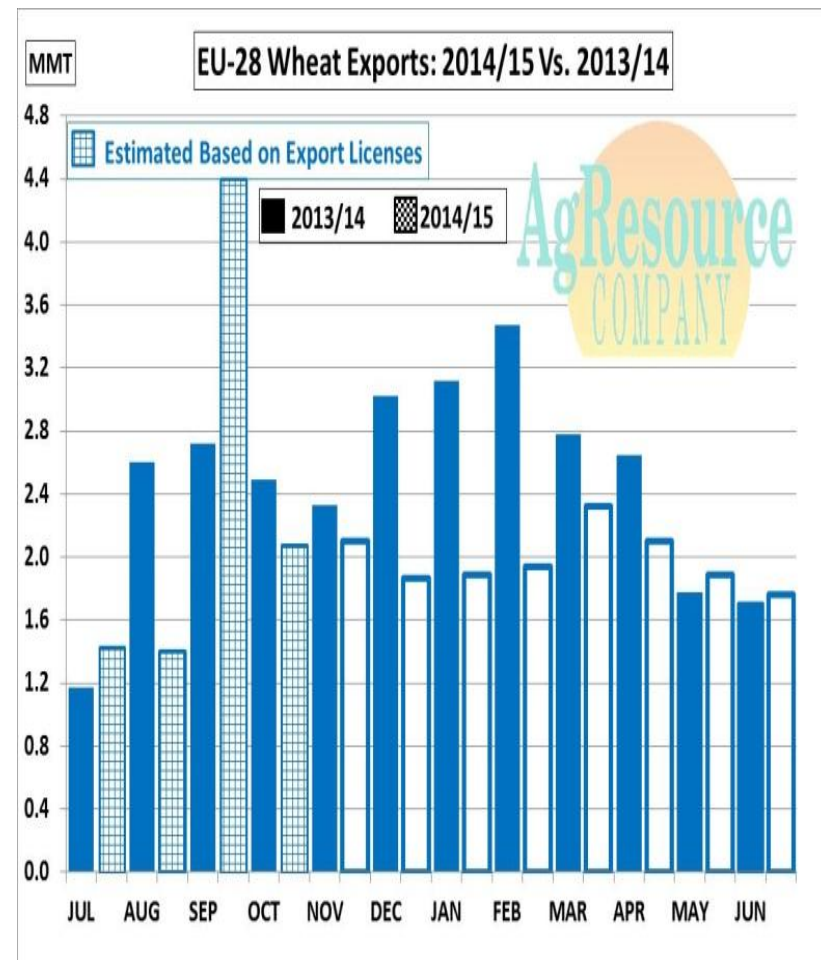
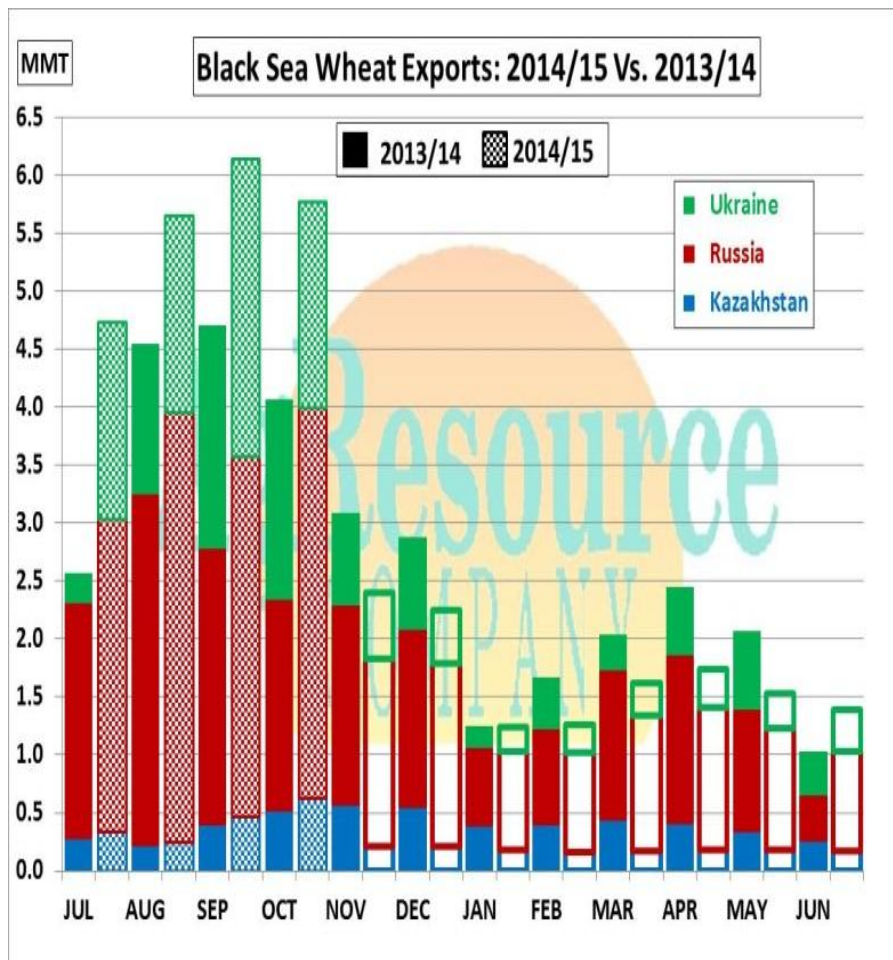
Big-8 Wheat Exports by Month (Some Figures for Recent Months Are Estimates Based on Data from Various Sources)



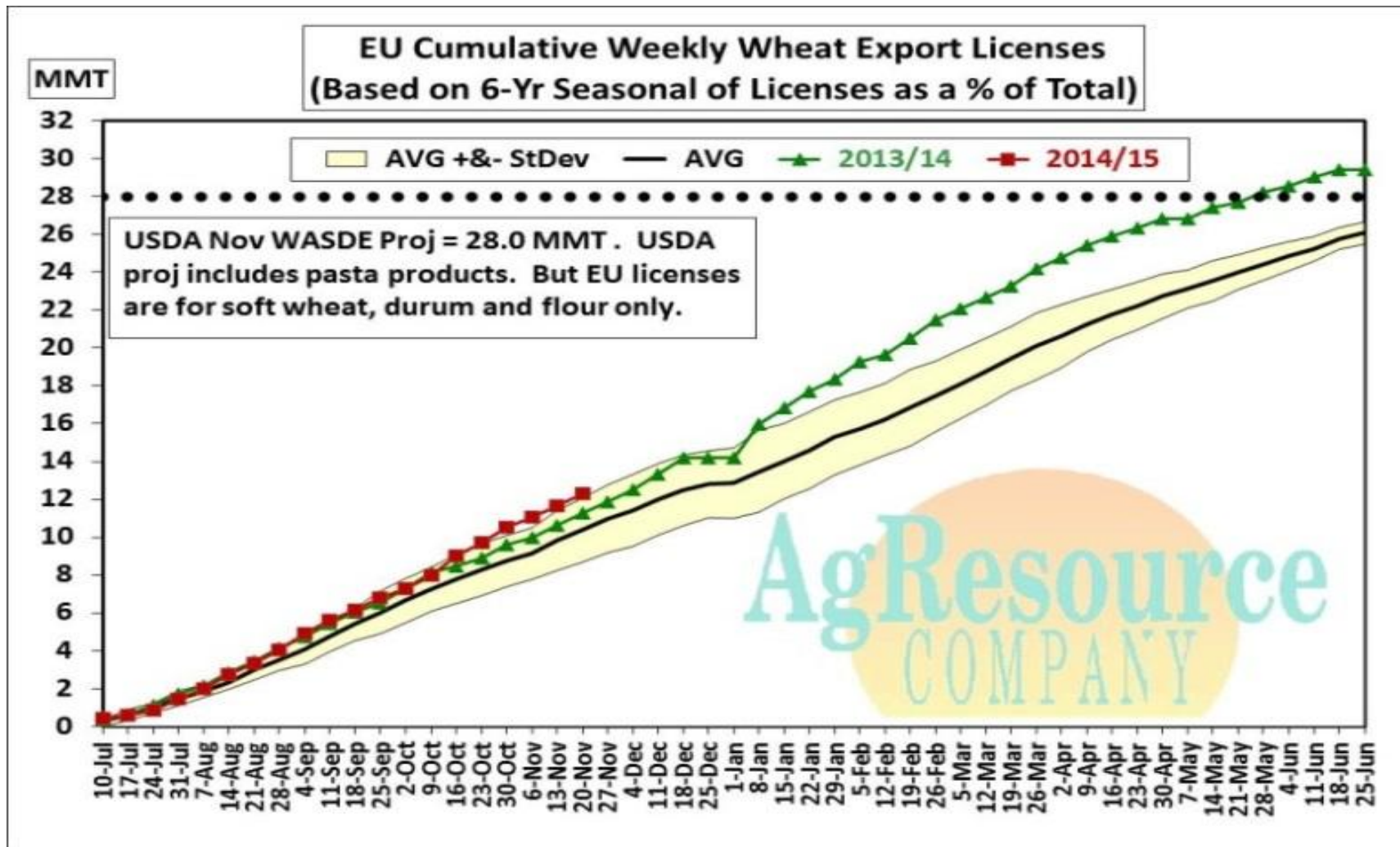
World Wheat Trade is Better than Expected thru October



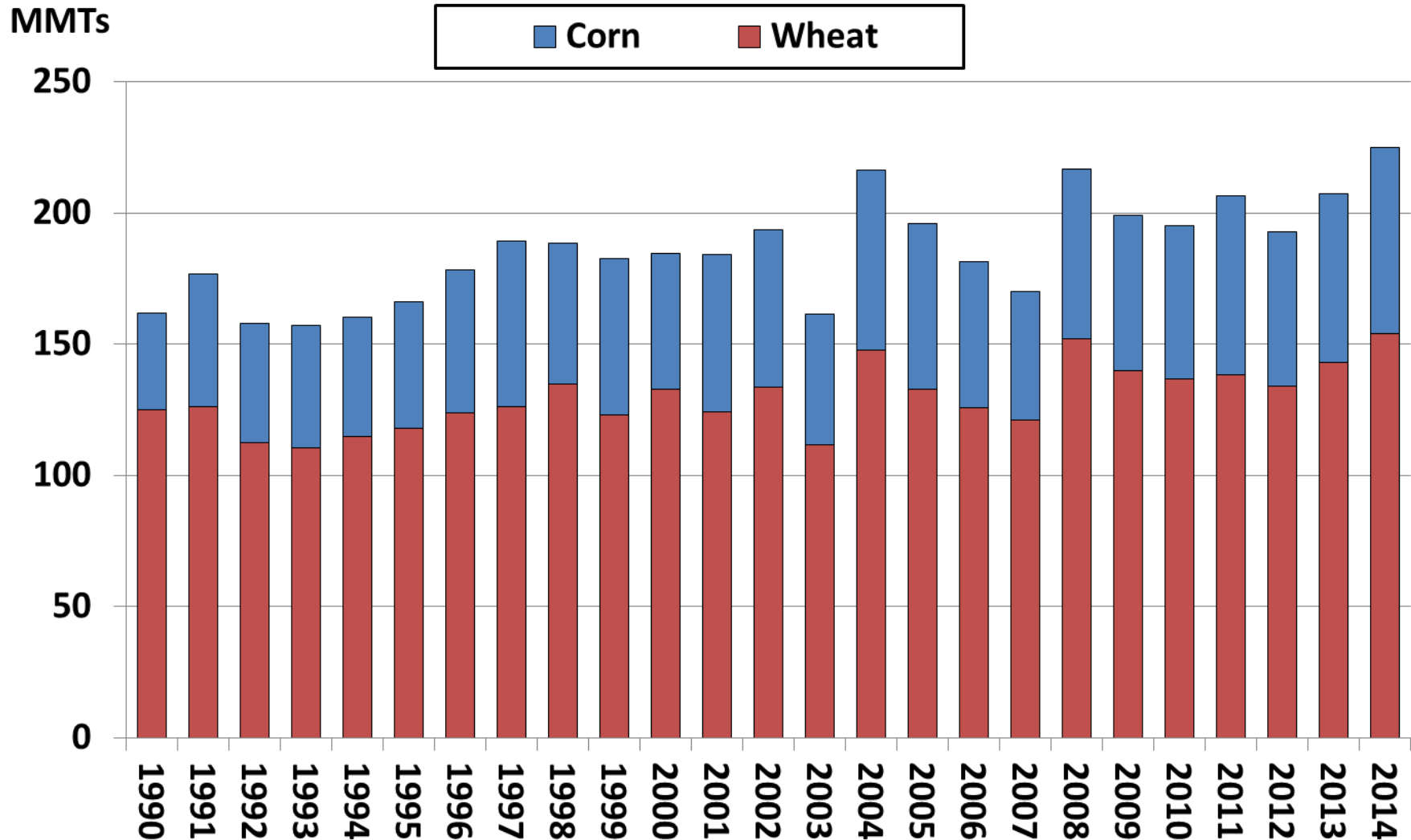
Black Sea Wheat Trade Strong to date, and EU posting a record large total in September



EU wheat export licenses 10% Above Last Year!

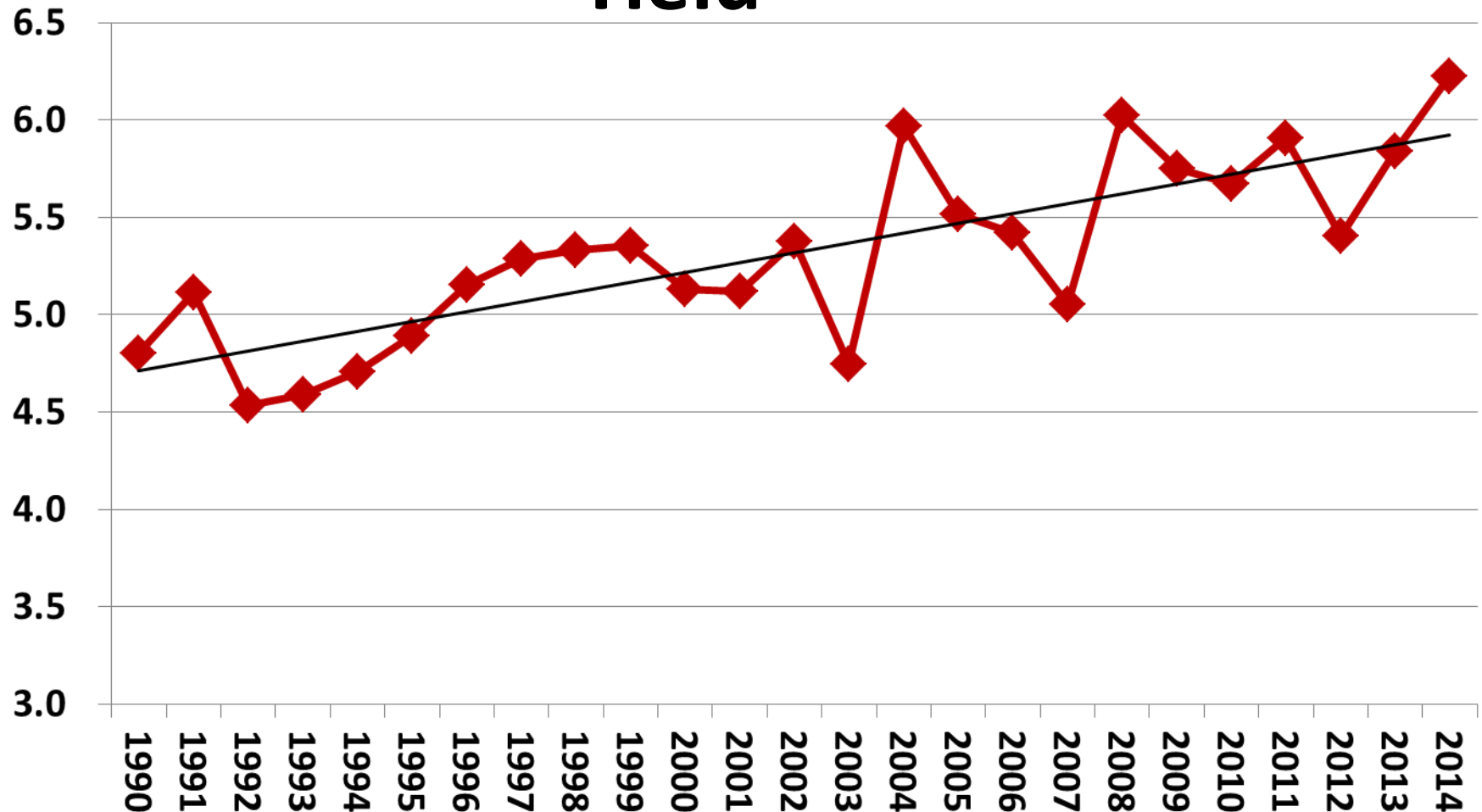


EU Wheat & Corn Production



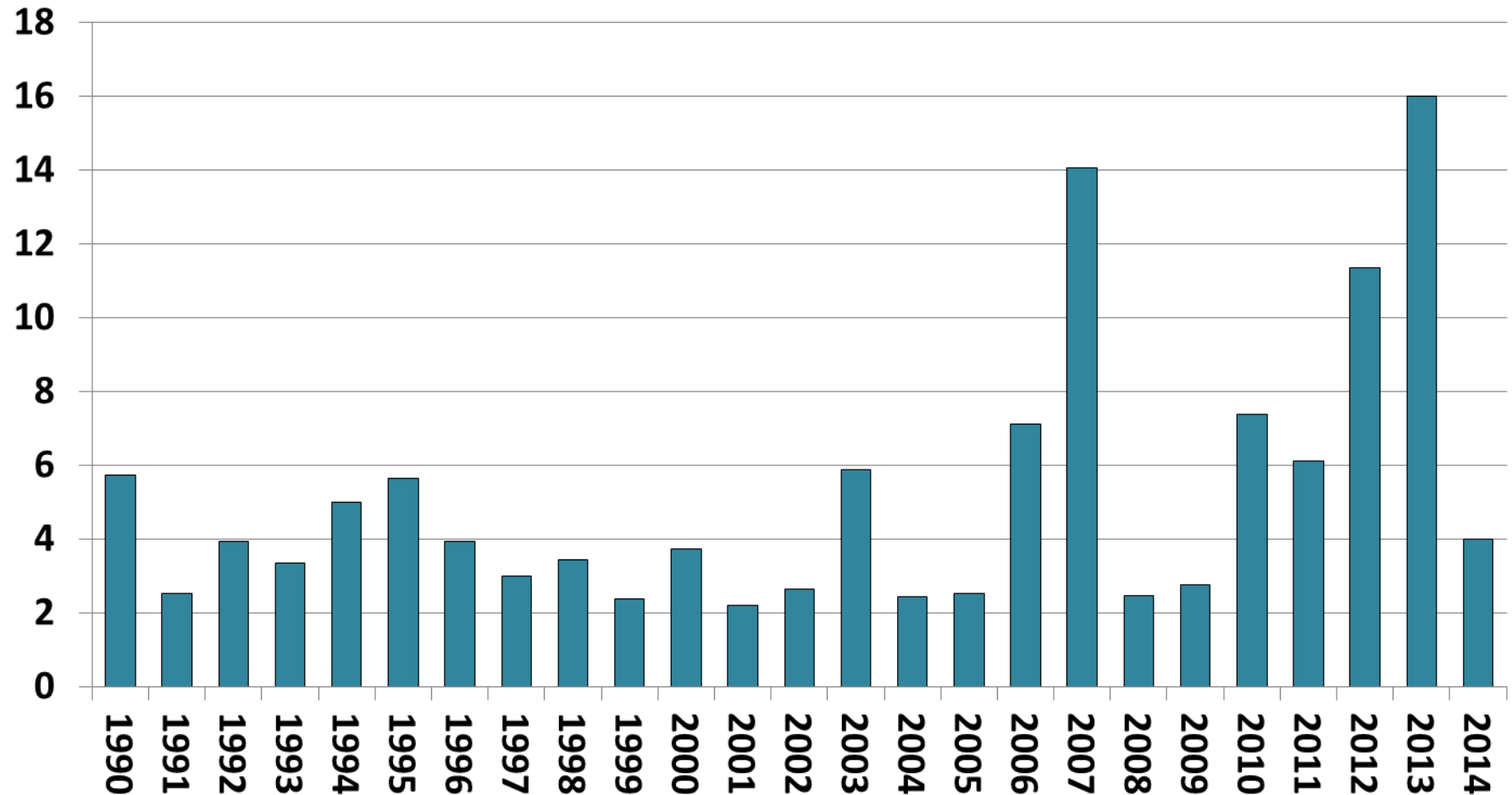
EU Wheat & Corn Combined Yield

MT/HA

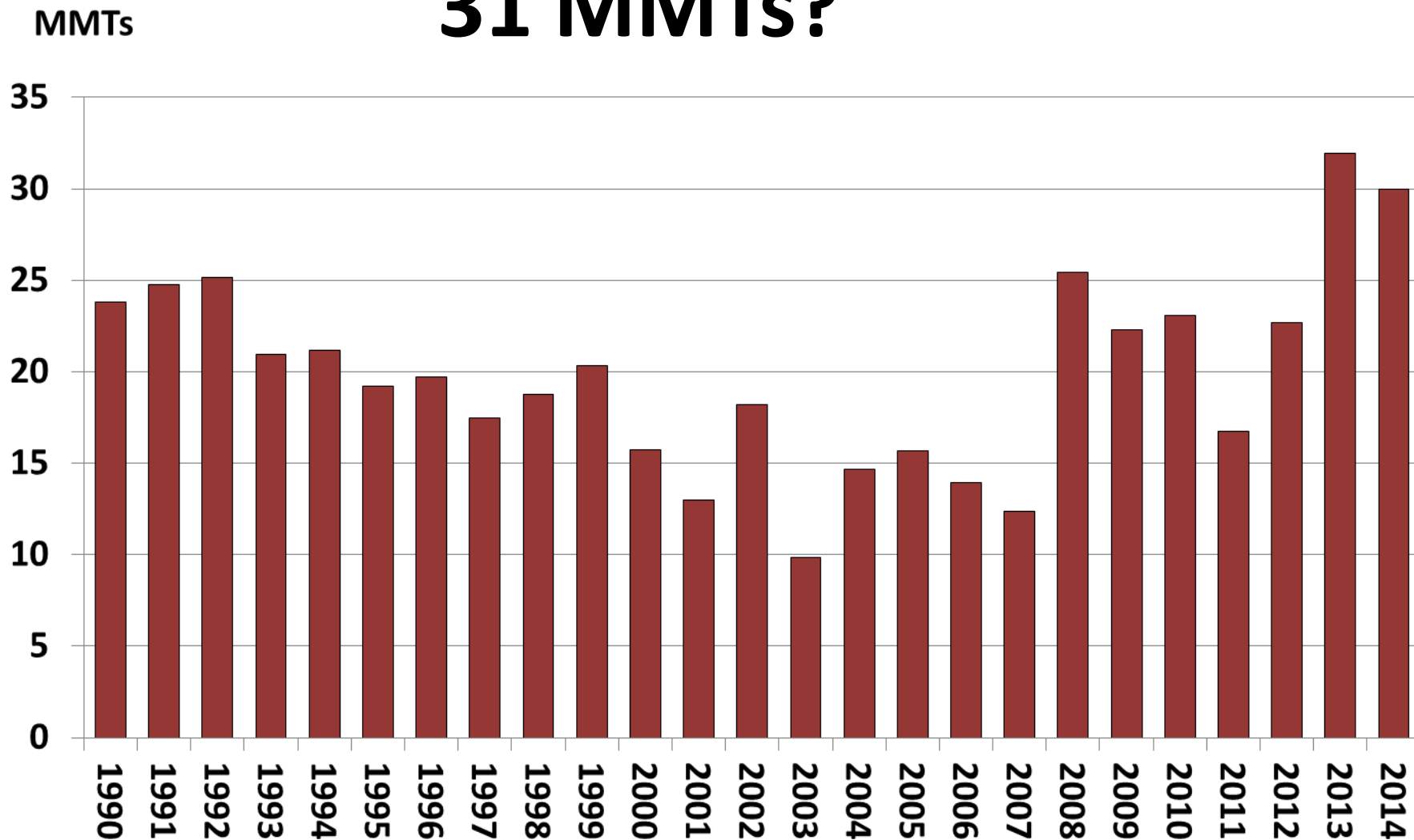


EU Corn Imports

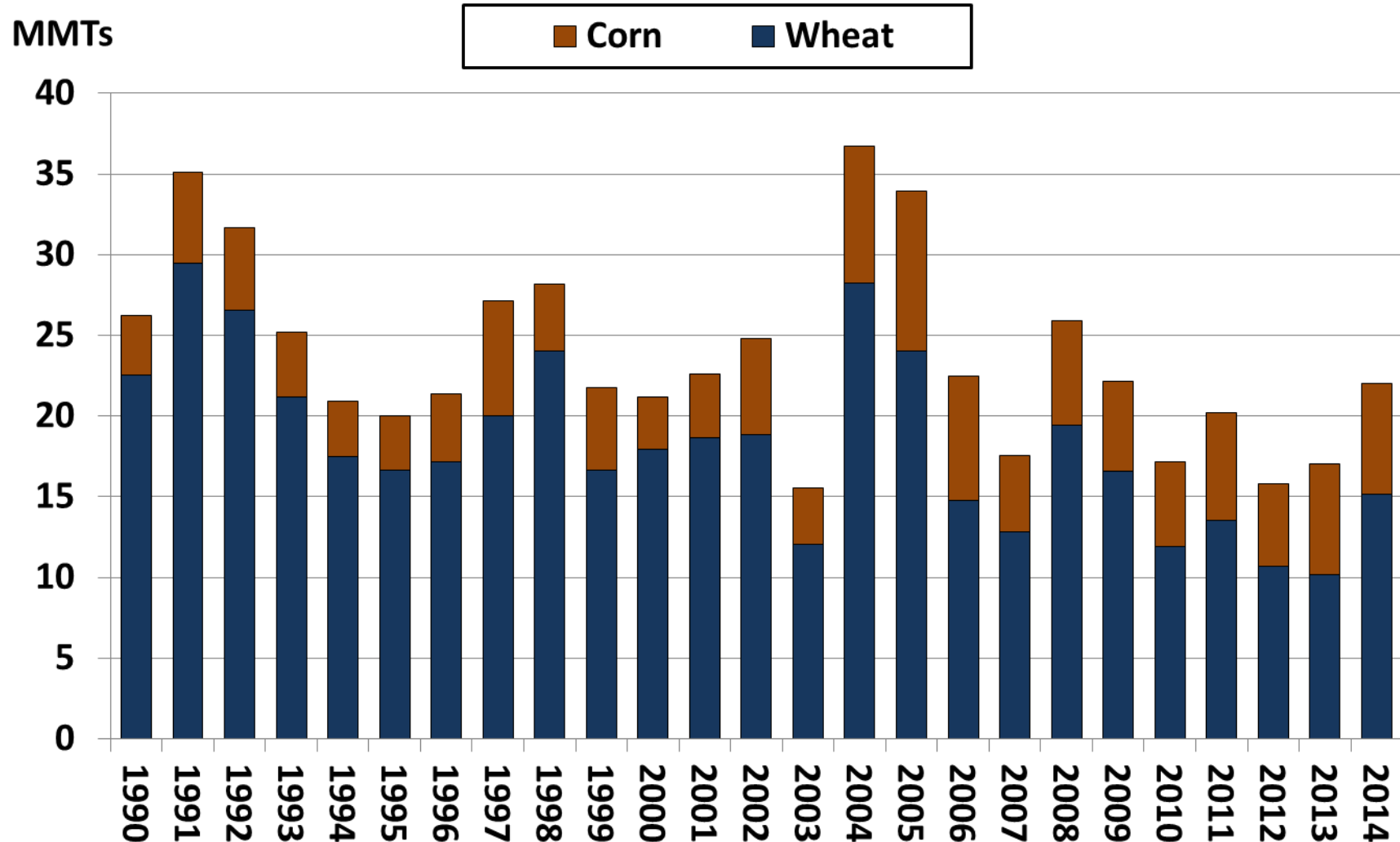
MMTs



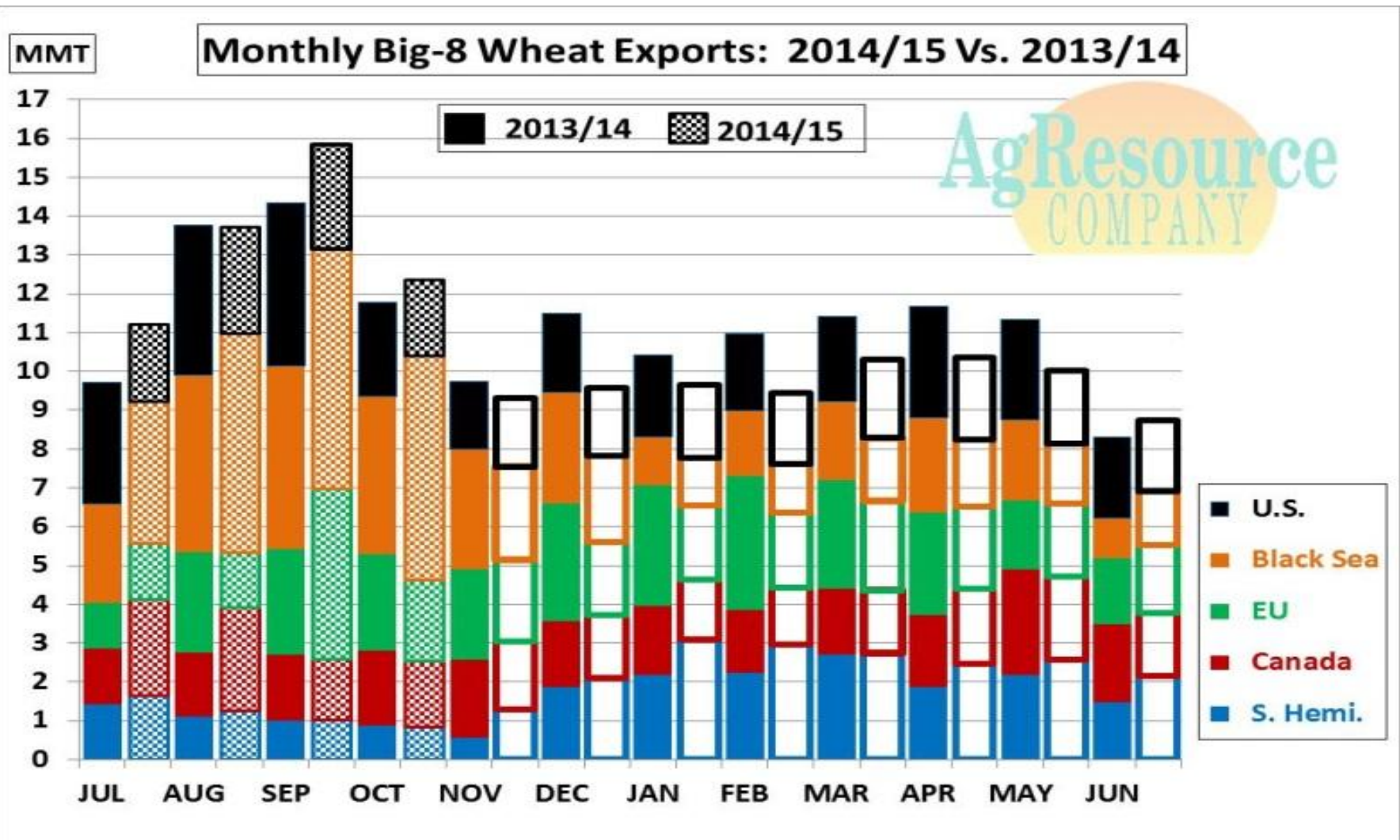
EU Wheat Exports – To Reach 31 MMTs?



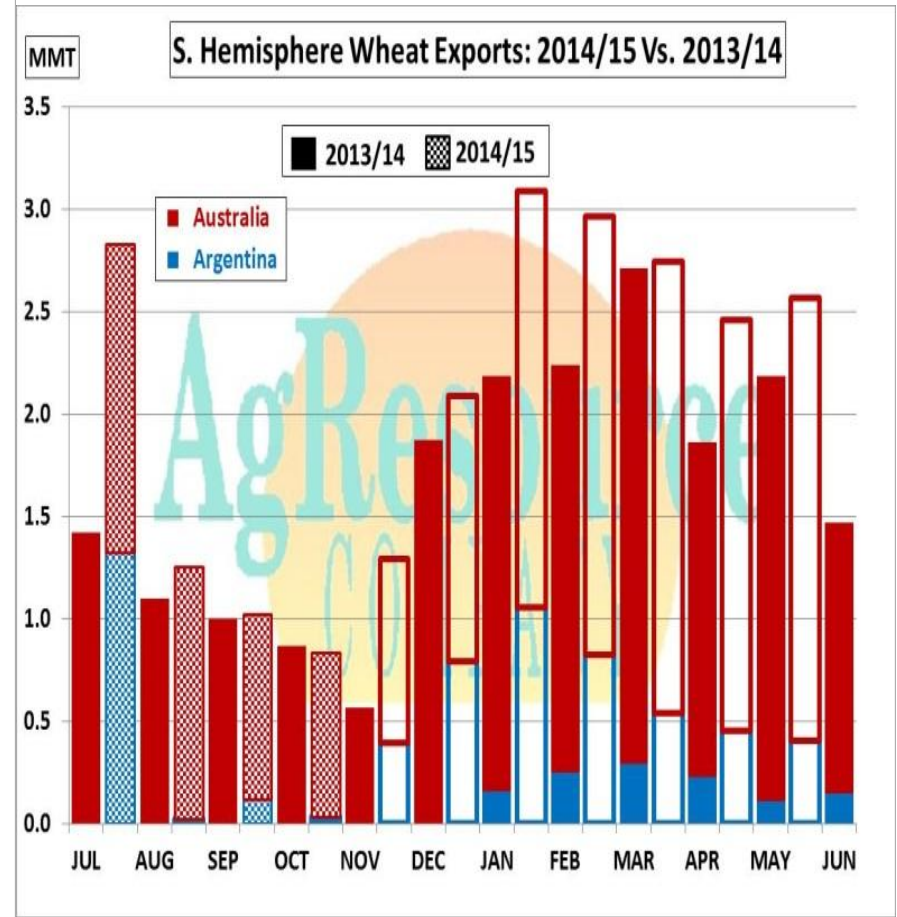
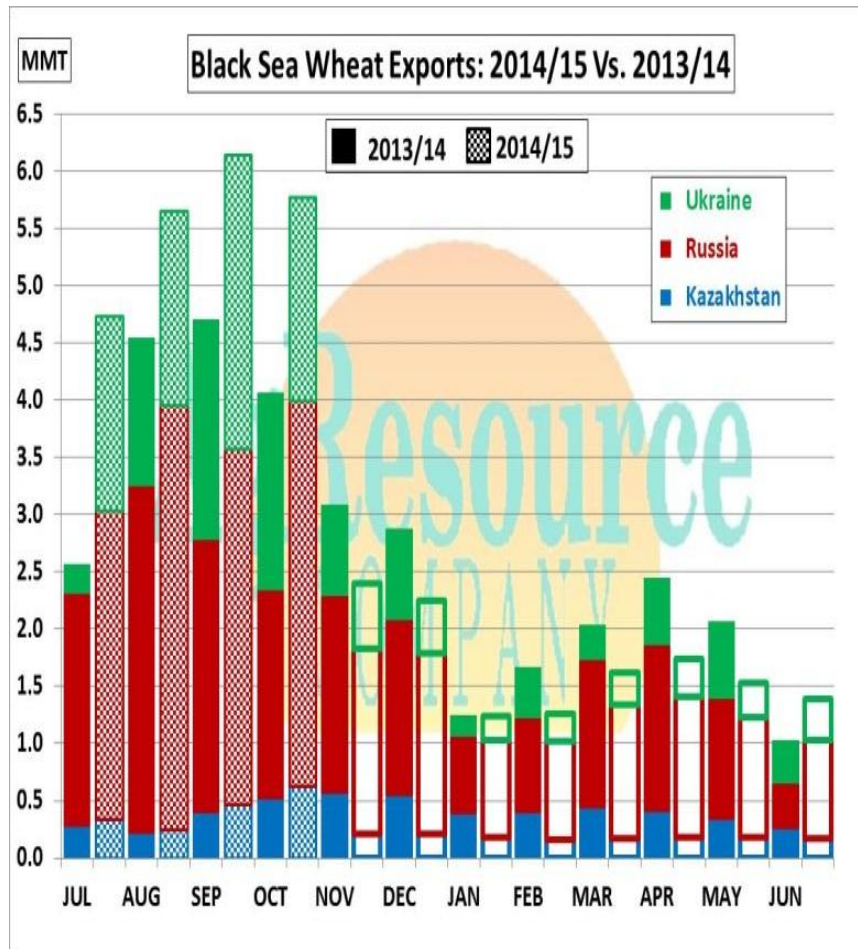
EU Wheat & Corn Ending Stocks



A flattening of world wheat demand into May/June?

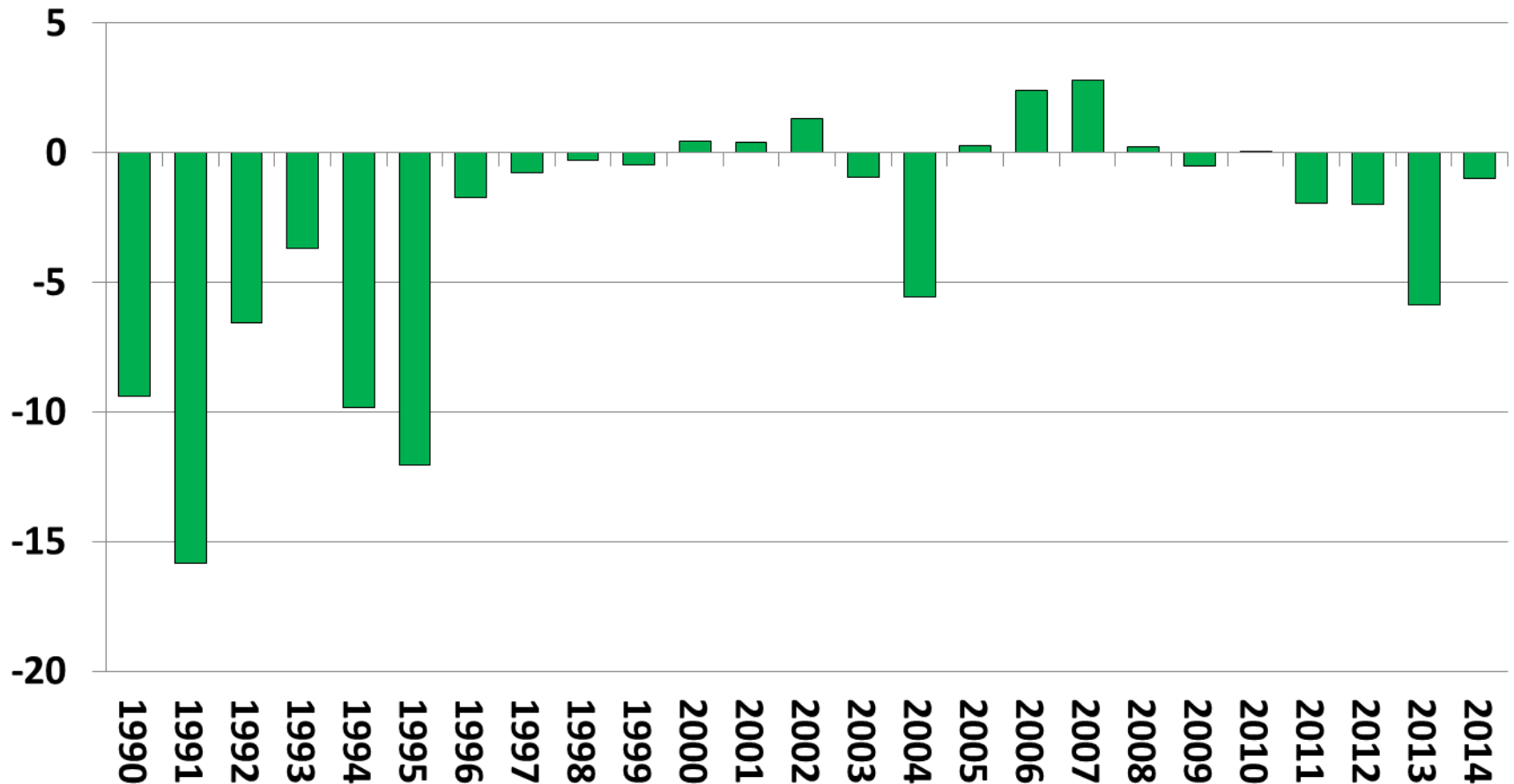


Big Shift coming in world wheat sourcing from Black Sea to S Hemisphere!

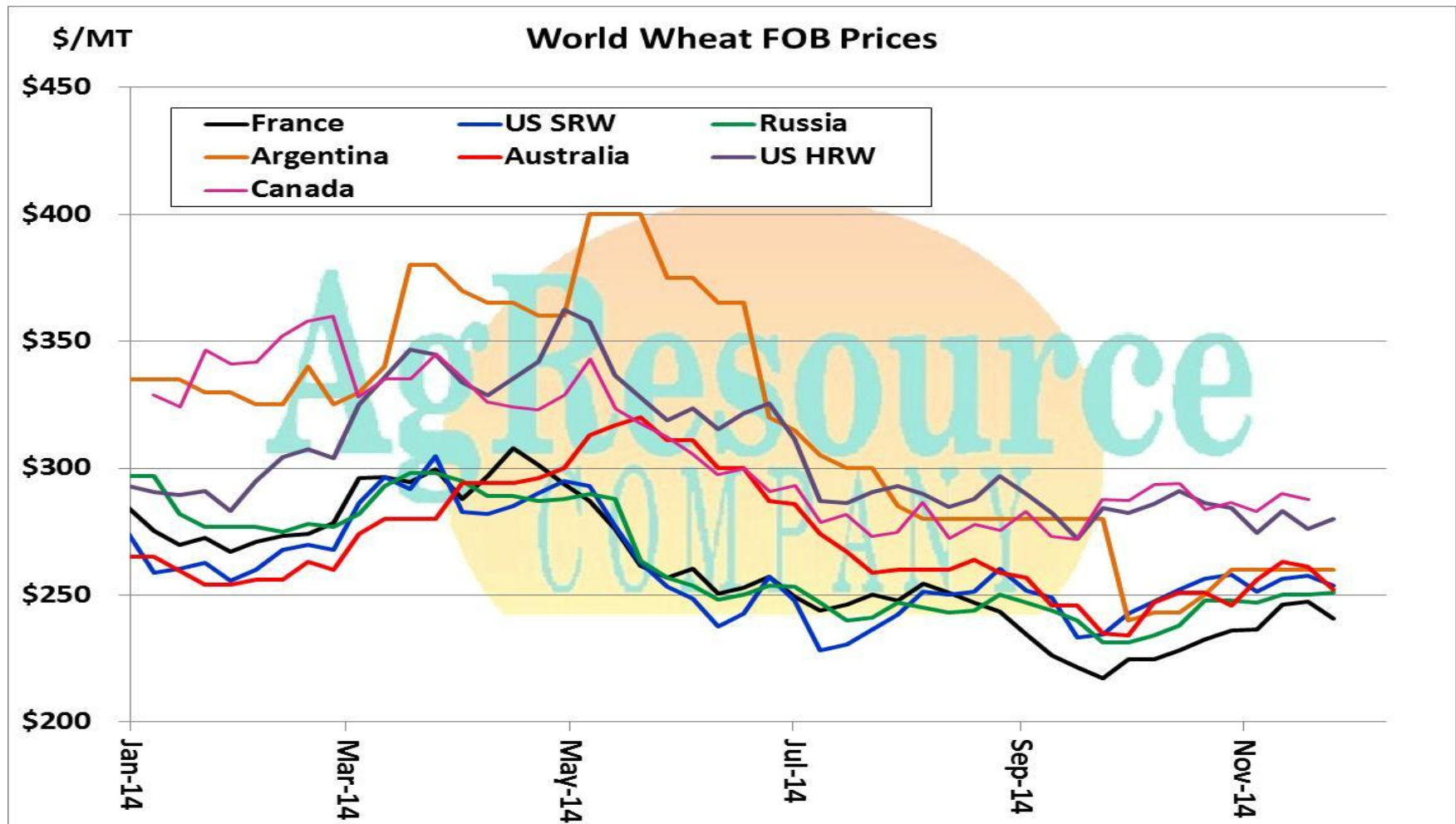


Chinese Net Wheat Trade

MMTs



Range Bound Wheat Prices with lower bias after March/April

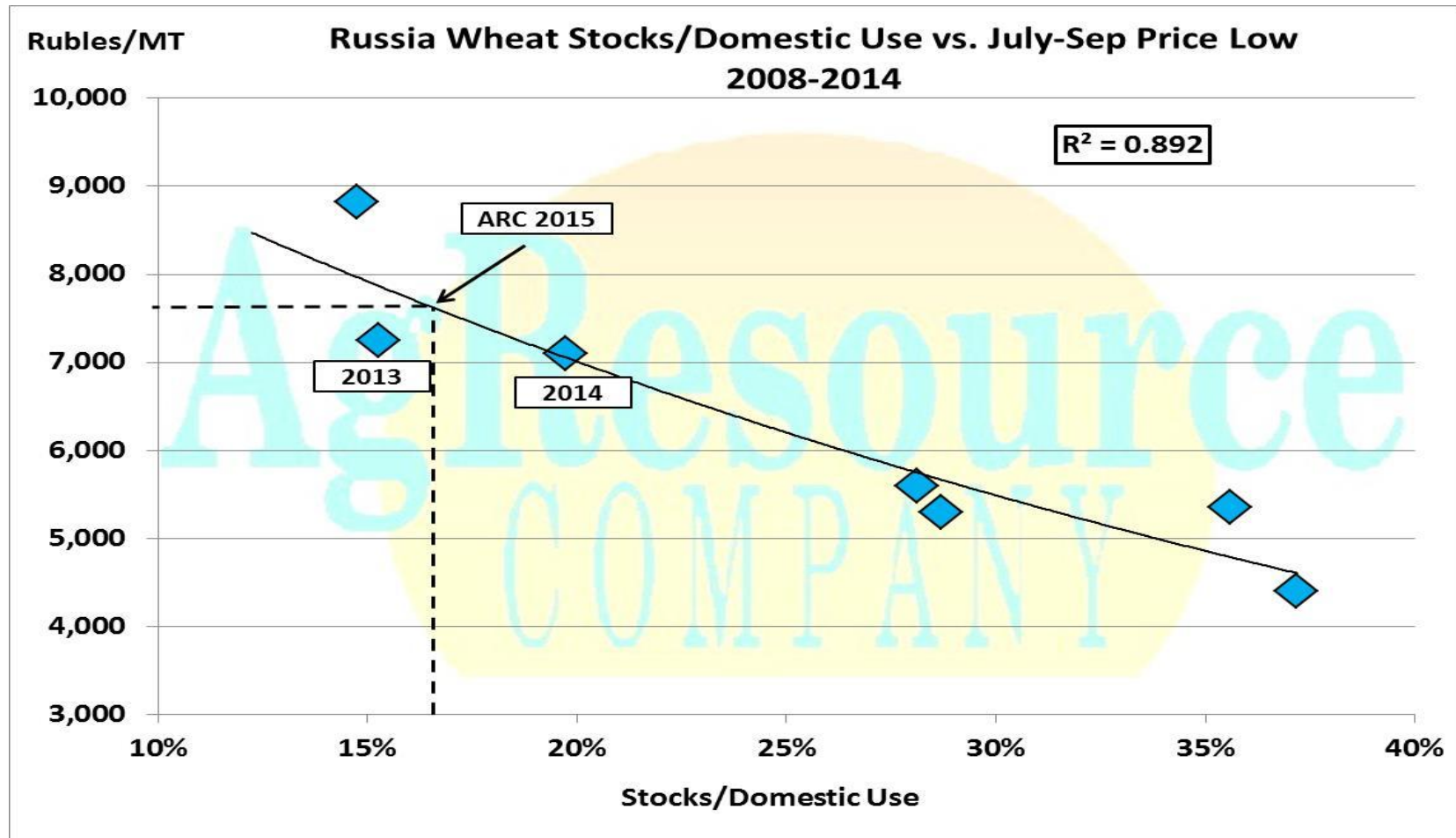


What Losses to Russia could Mean in 2015/16?

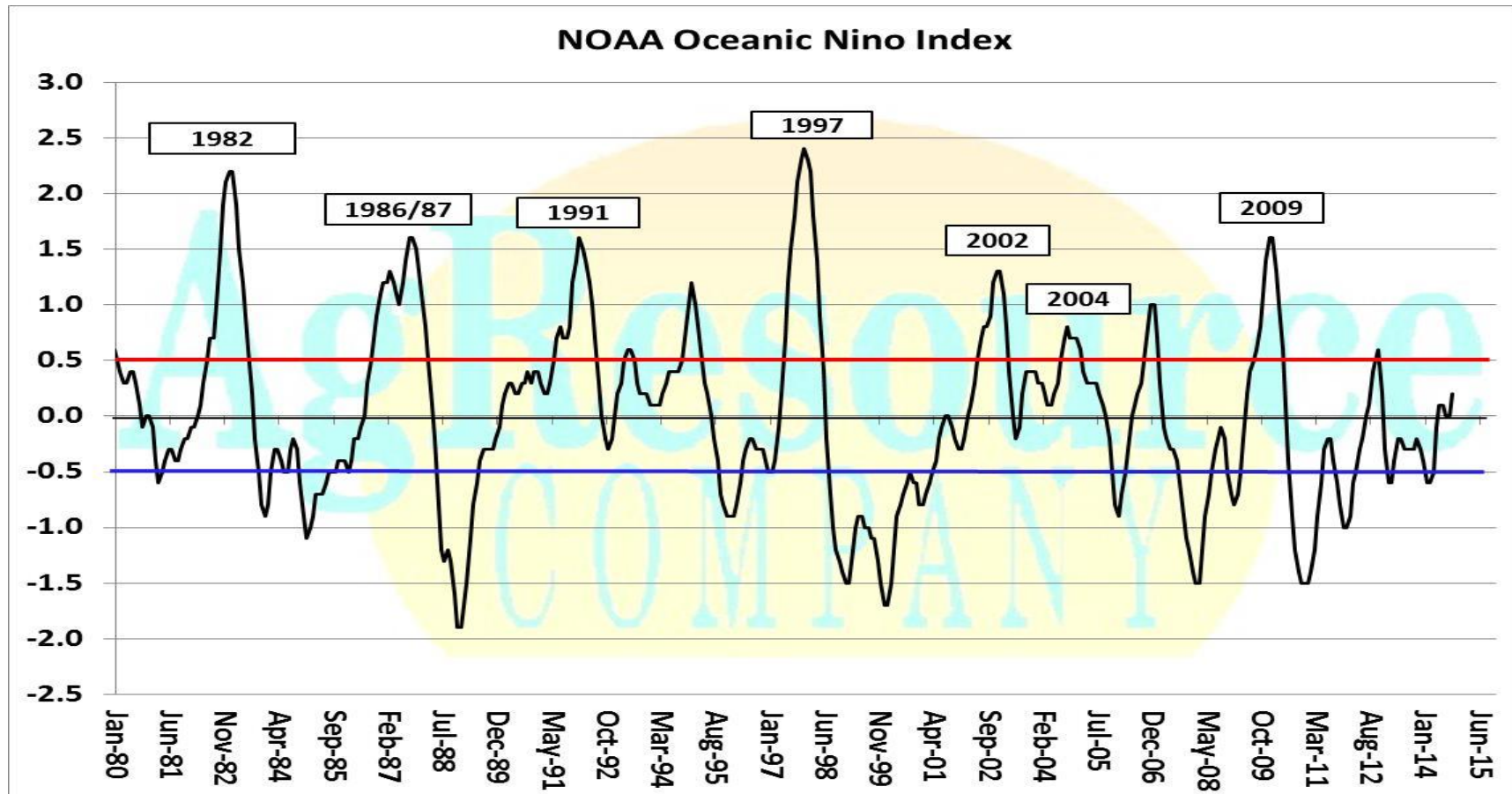
** Russian Wheat Supply/Demand Balance:

	----- Mils of Hectares/Tons -----			
	USDA	USDA	USDA	ARC
	12/13	13/14	14/15	15/16
Harvested	21.3	23.4	23.8	23.0
Yield	1.8	2.2	2.5	2.3
Production	37.7	52.1	59.0	52.9
Carryin	10.9	5.0	5.2	6.9
Imports	1.2	0.8	0.2	0.9
T Supply	49.8	57.8	64.4	60.7
Feed/Resid	11.9	12.5	13.0	13.2
FSI	21.7	21.6	22.0	22.2
Exports	11.3	18.5	22.5	19.5
Total Use	44.8	52.6	57.5	54.9
End Stocks	5.0	5.2	6.9	5.8
Stocks/Use	11.0%	9.9%	12.0%	10.7%

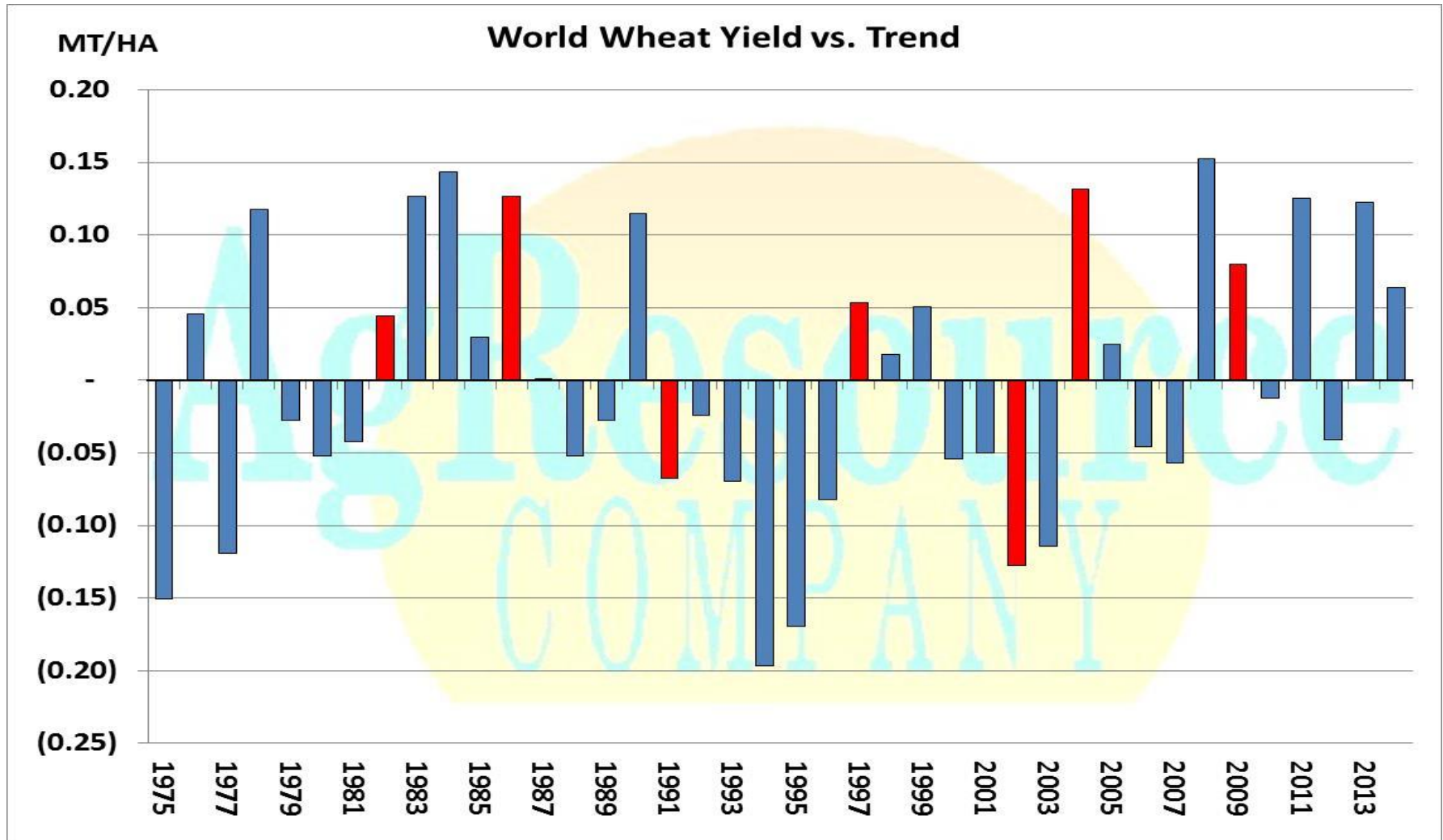
Impact on Russian Wheat prices assuming stable Ruble?



El Nino forming that should last until June or July



World Wheat Yields in El Nino Years



2015/16 World Wheat Balance:

Early forecast!

** World Wheat Supply/Demand Balance:

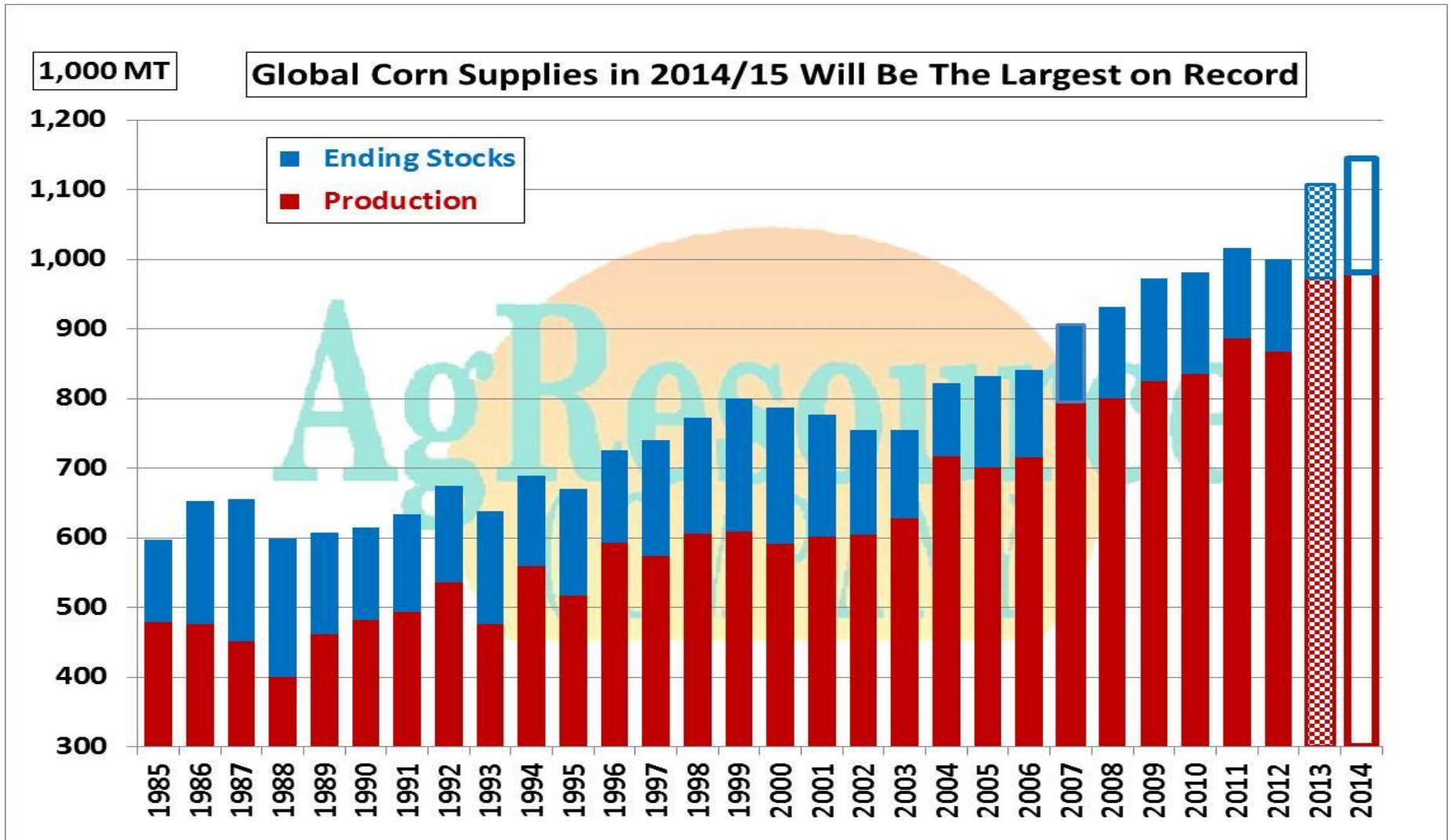
----- Mils of Hectares/Tons -----

	USDA	USDA	USDA	ARC
	12/13	13/14	14/15	15/16
Harvested	216.3	220.8	221.4	221.8
Yield	3.04	3.24	3.20	3.23
Production	657.9	714.7	719.9	716.4
Carryin	196.2	174.8	185.7	192.9
Imports	144.2	156.6	153.4	152.0
T Supply	998.3	1,046.1	1,059.0	1,061.3
Feed/Resid	137.1	130.2	139.9	141.0
FSI	549.1	564.3	571.3	575.0
Exports	137.4	165.8	154.9	152.0
Total Use	823.6	860.4	866.1	868.0
End Stocks	174.8	185.7	192.9	193.3

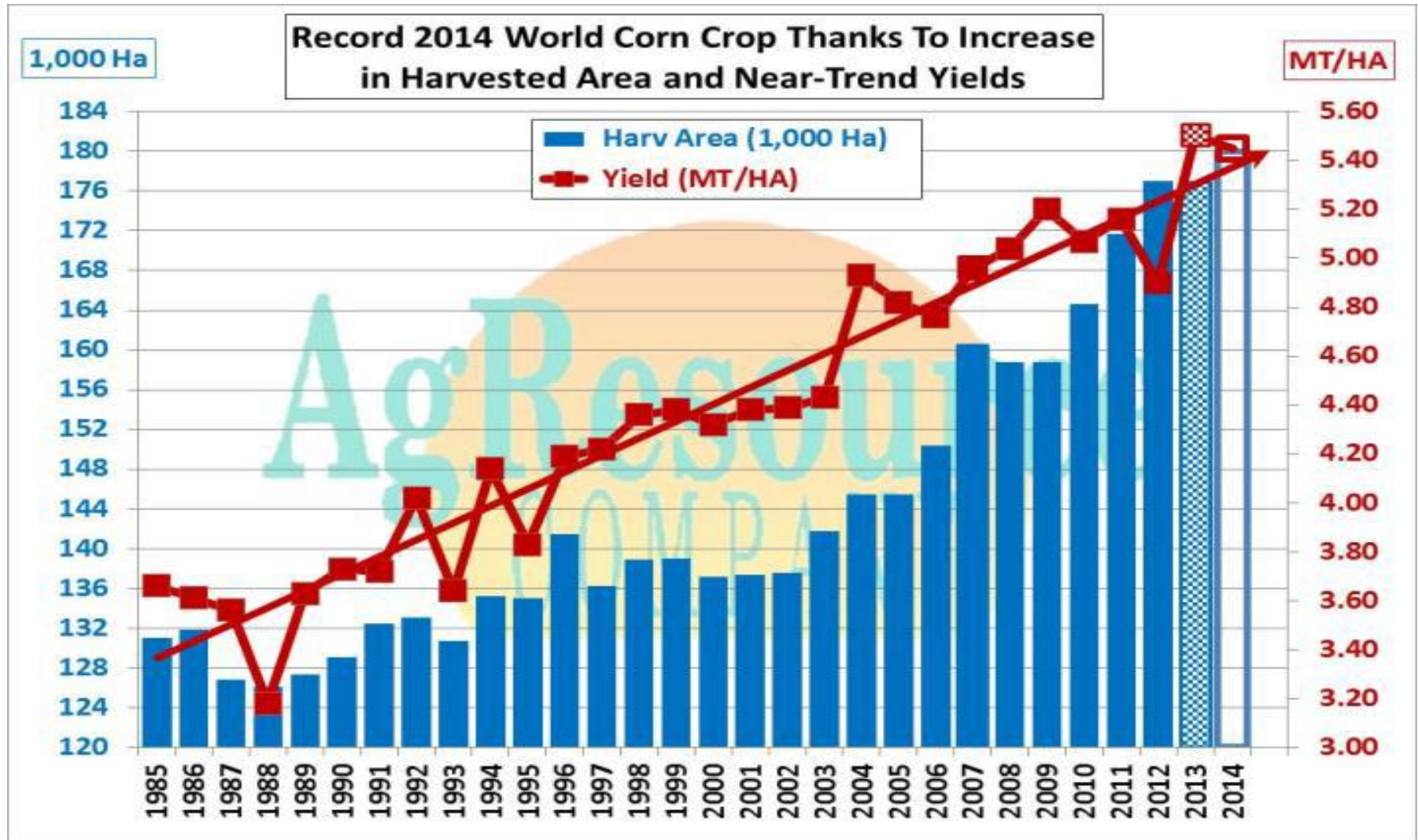
Is world corn trapped in a range trade?



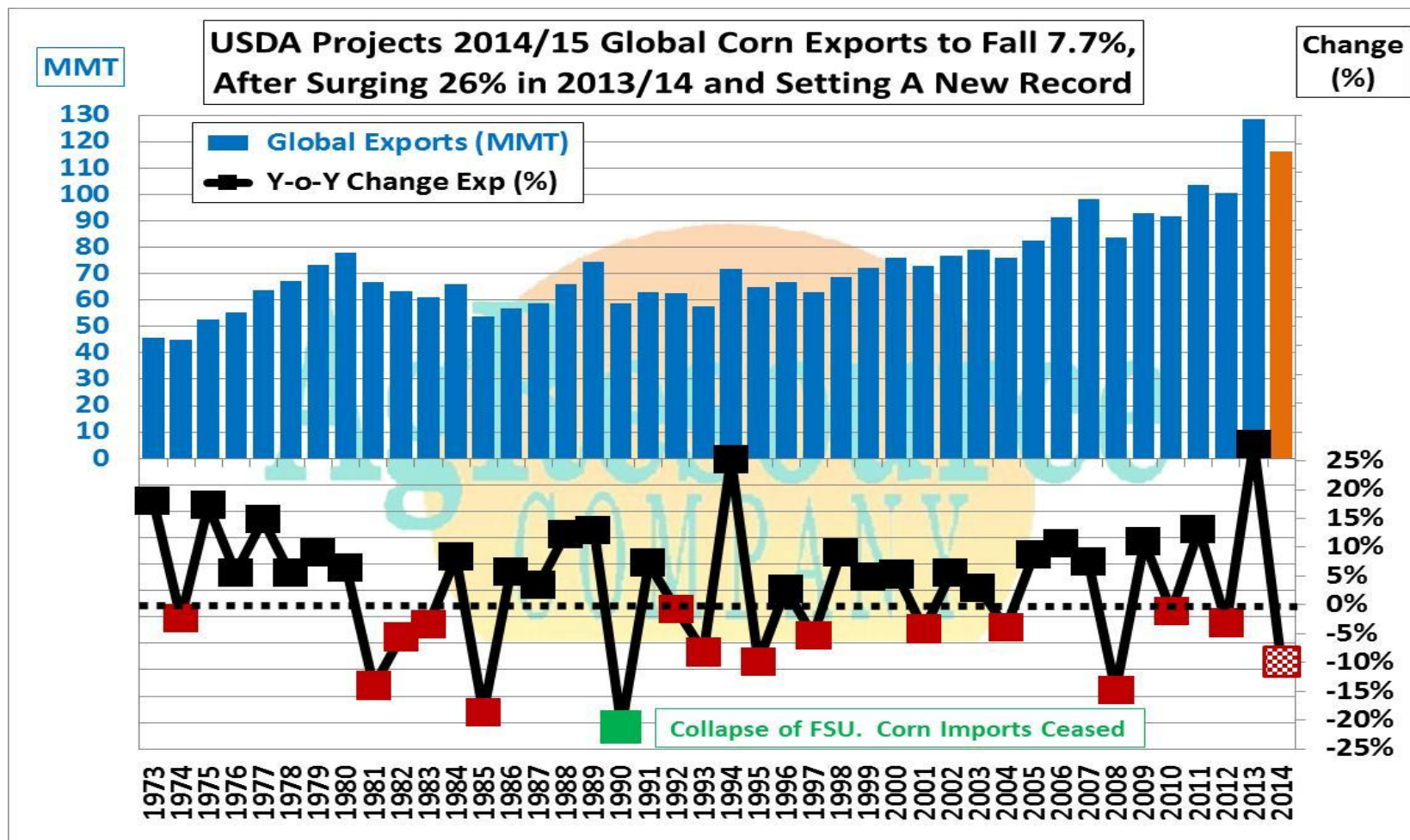
Global Corn Supplies Surge



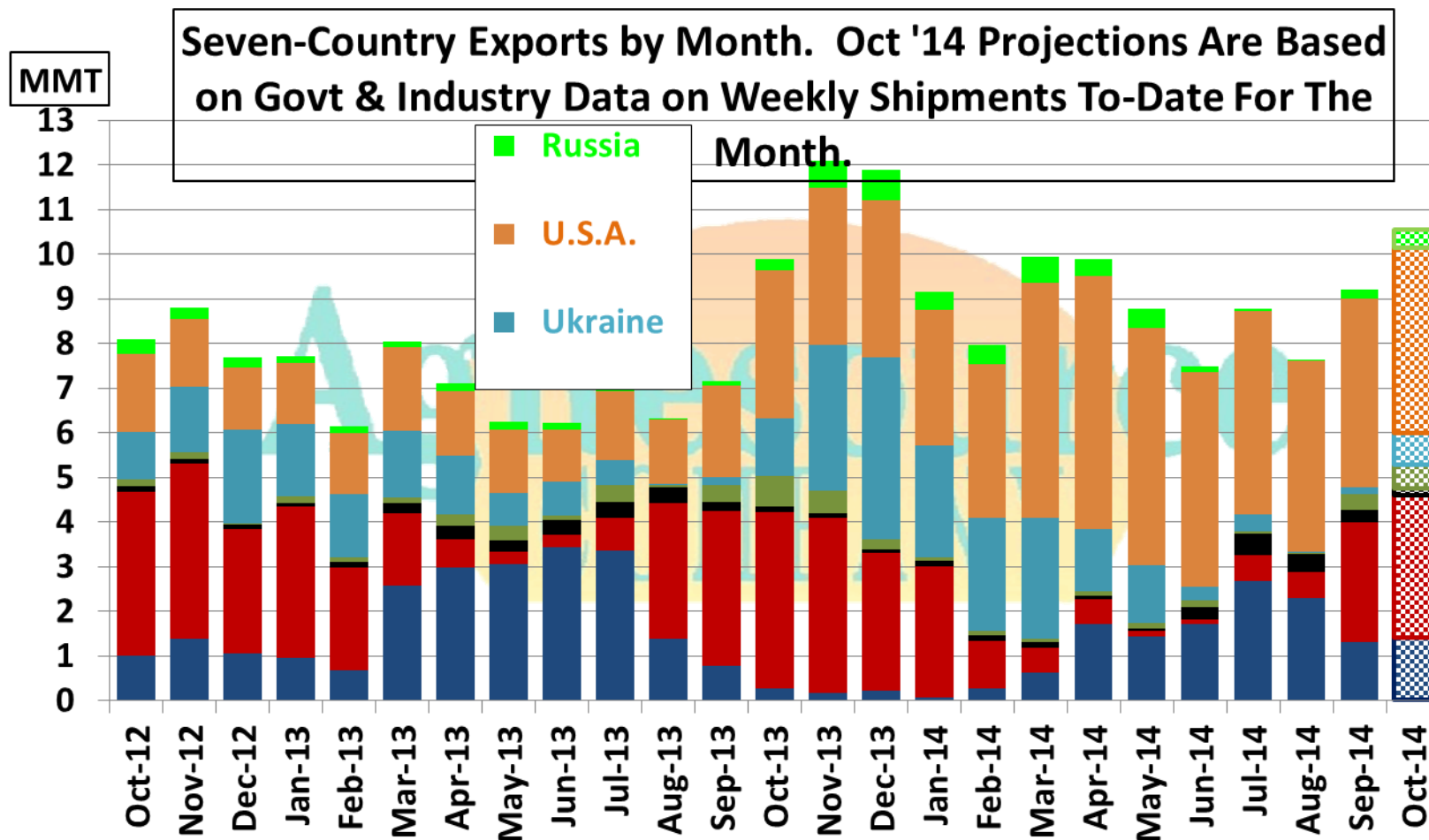
Increase in World Harvested Acres and Trend Yields



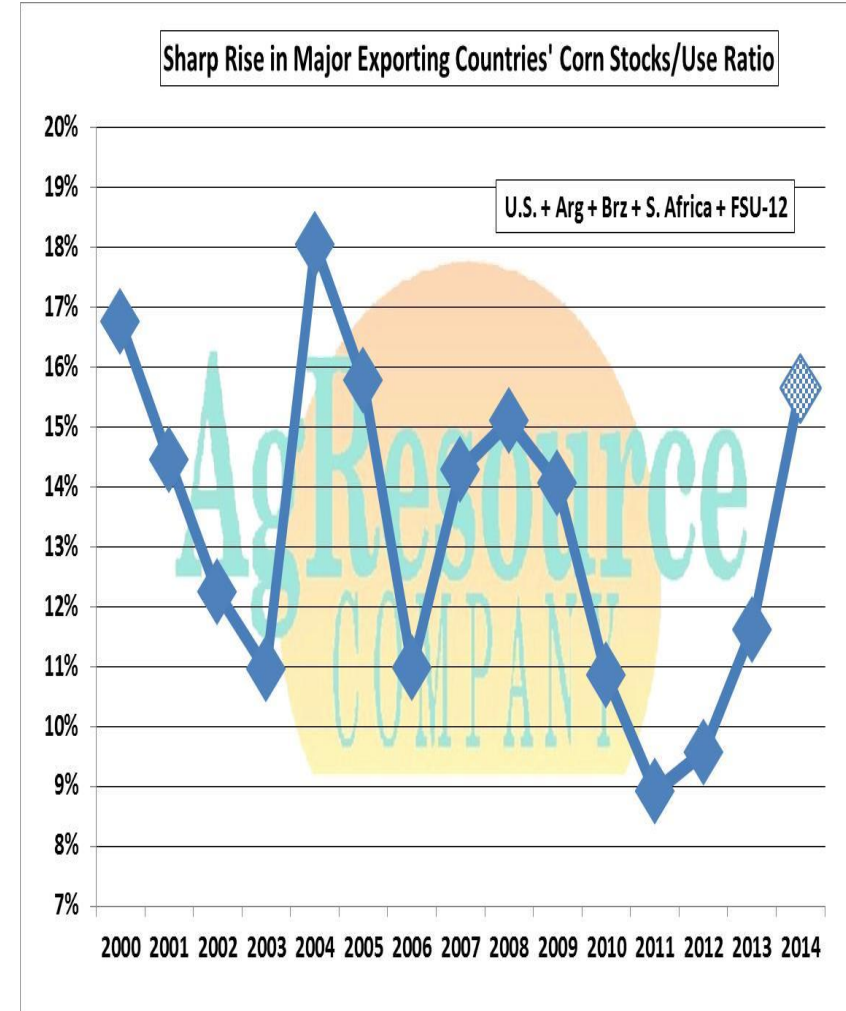
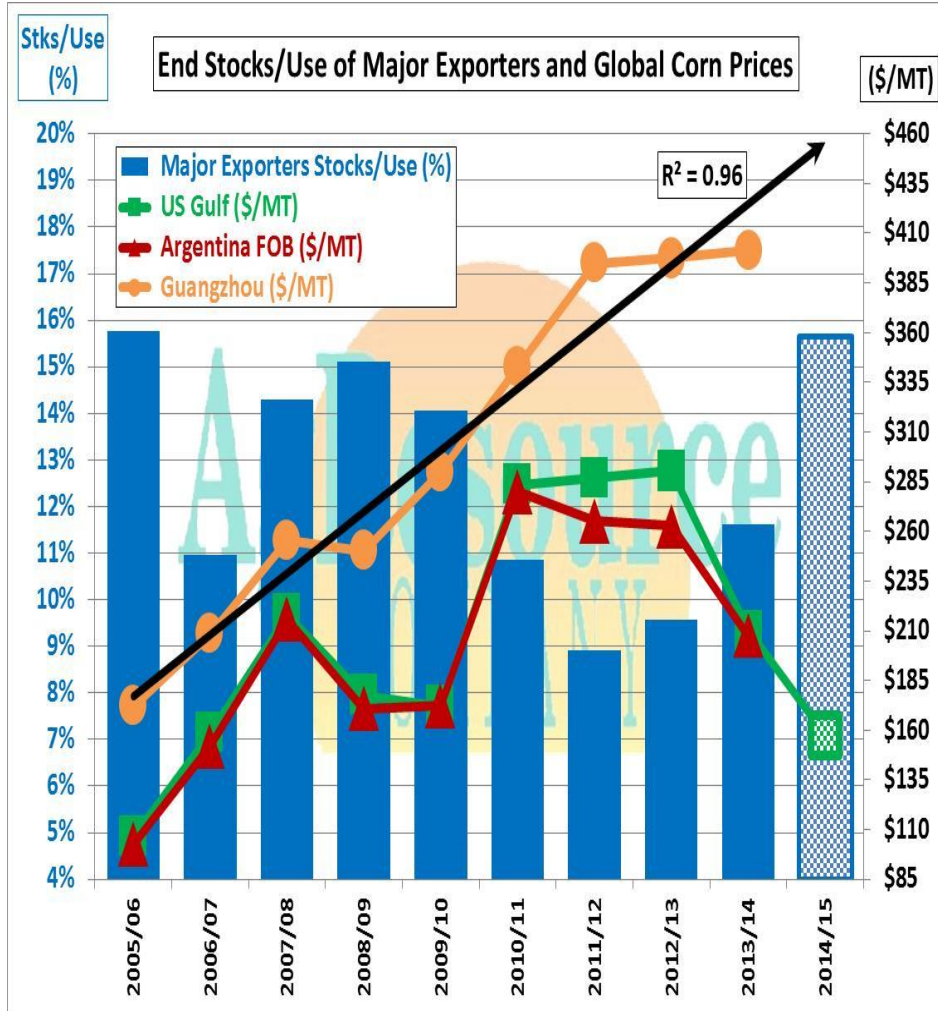
Global Corn Trade To Soften on large Stocks and lack of Chinese Imports



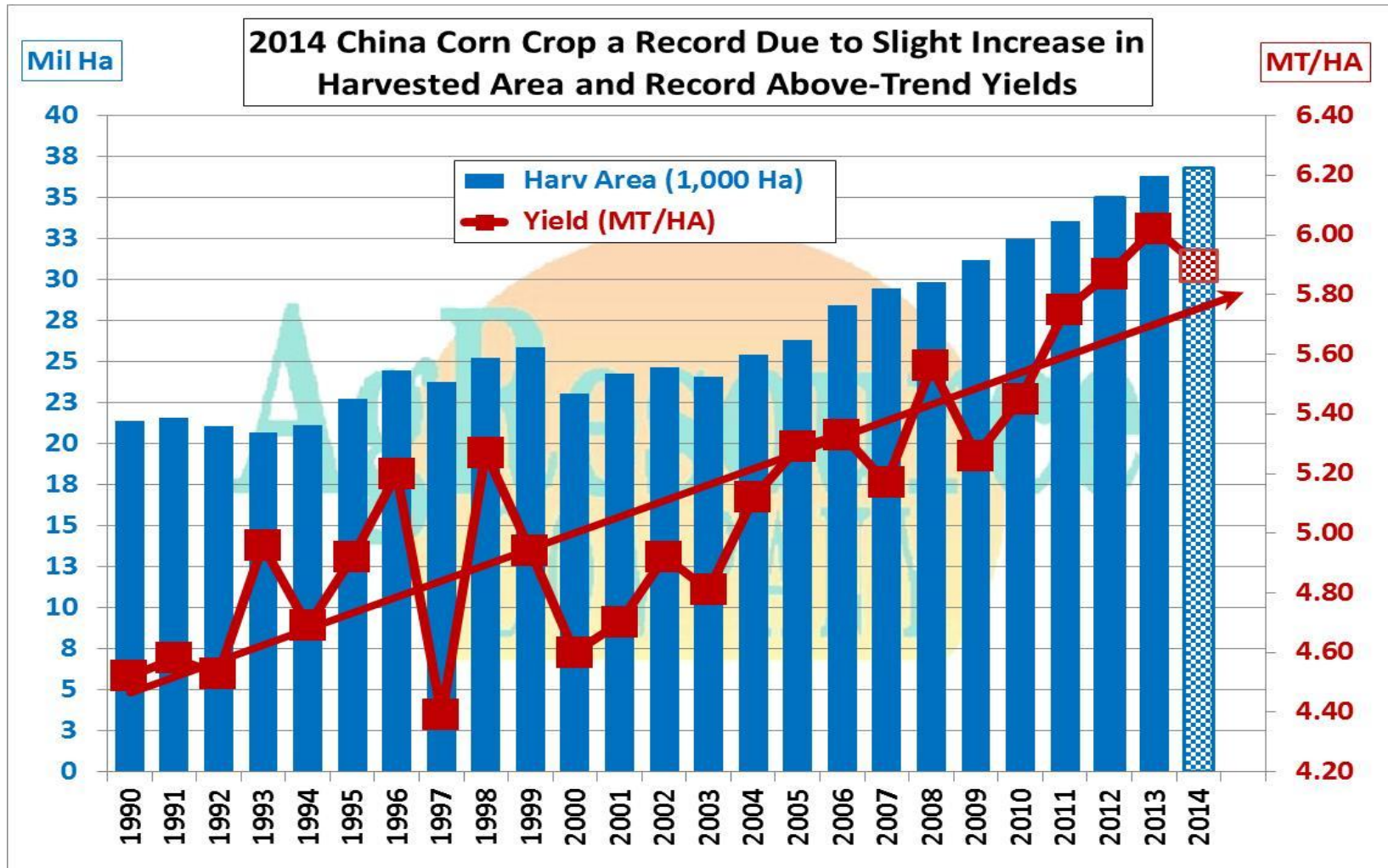
World Corn Trade Expanded in October & will peak in December



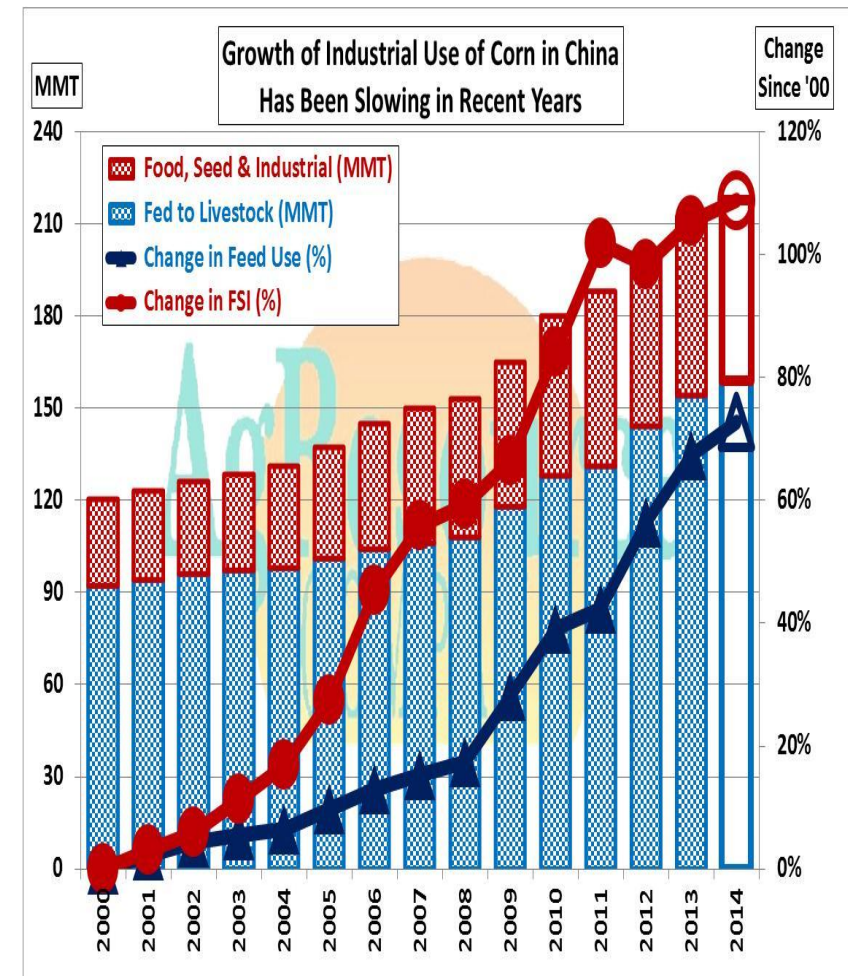
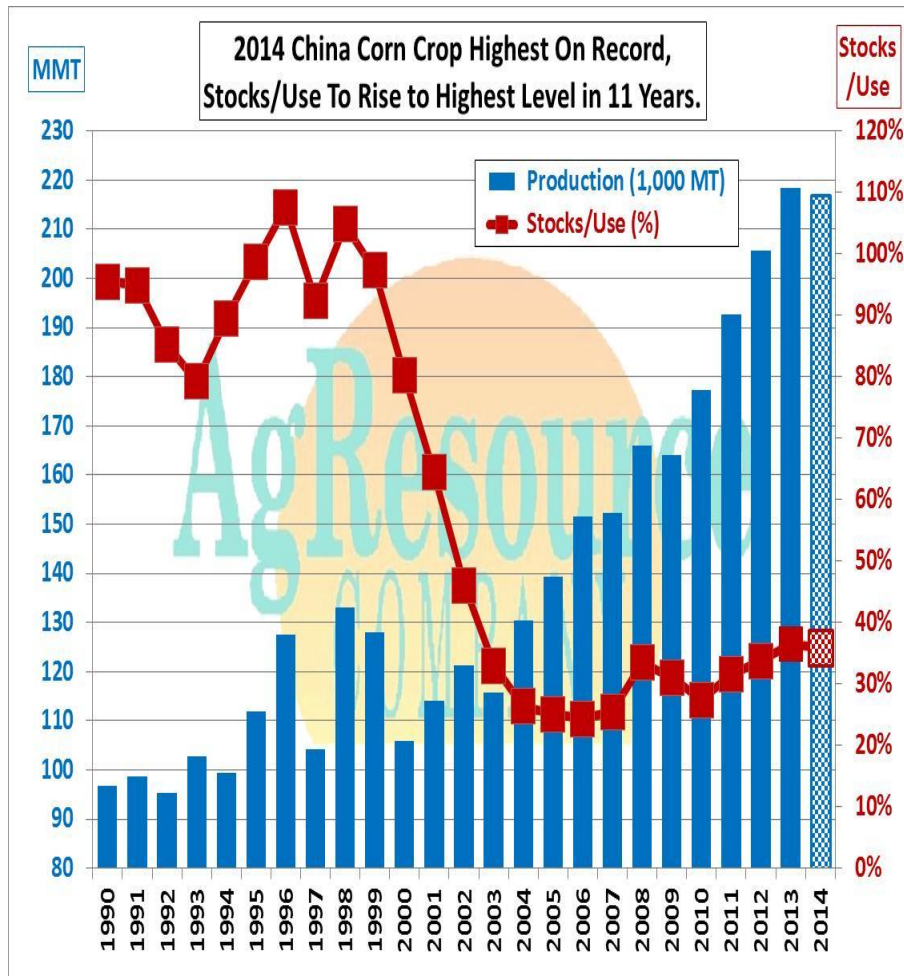
World Corn Stocks 2014/15 – Rebuilding!



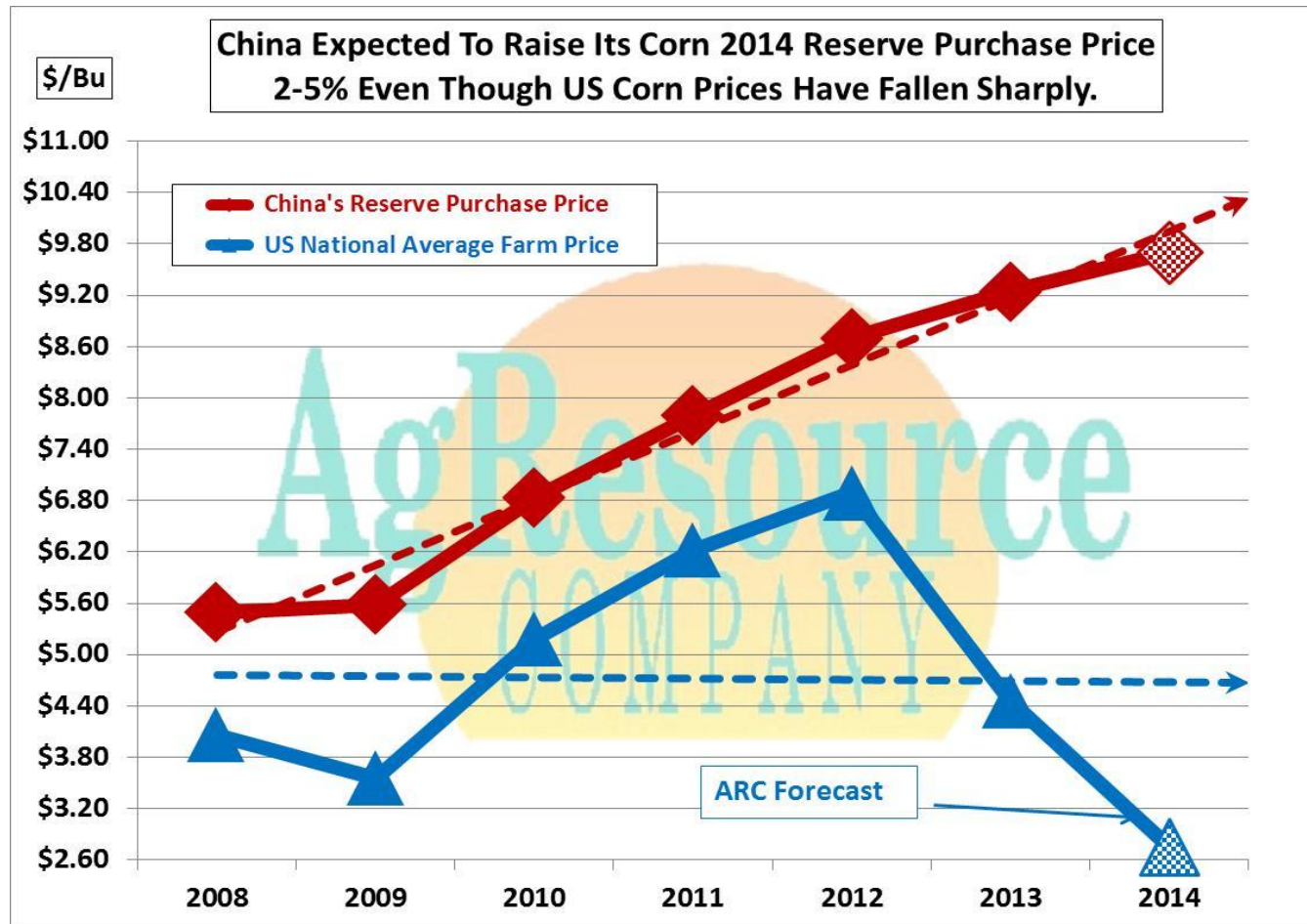
Where is China in the World Corn Market?



China Producing more Corn than it's Consuming

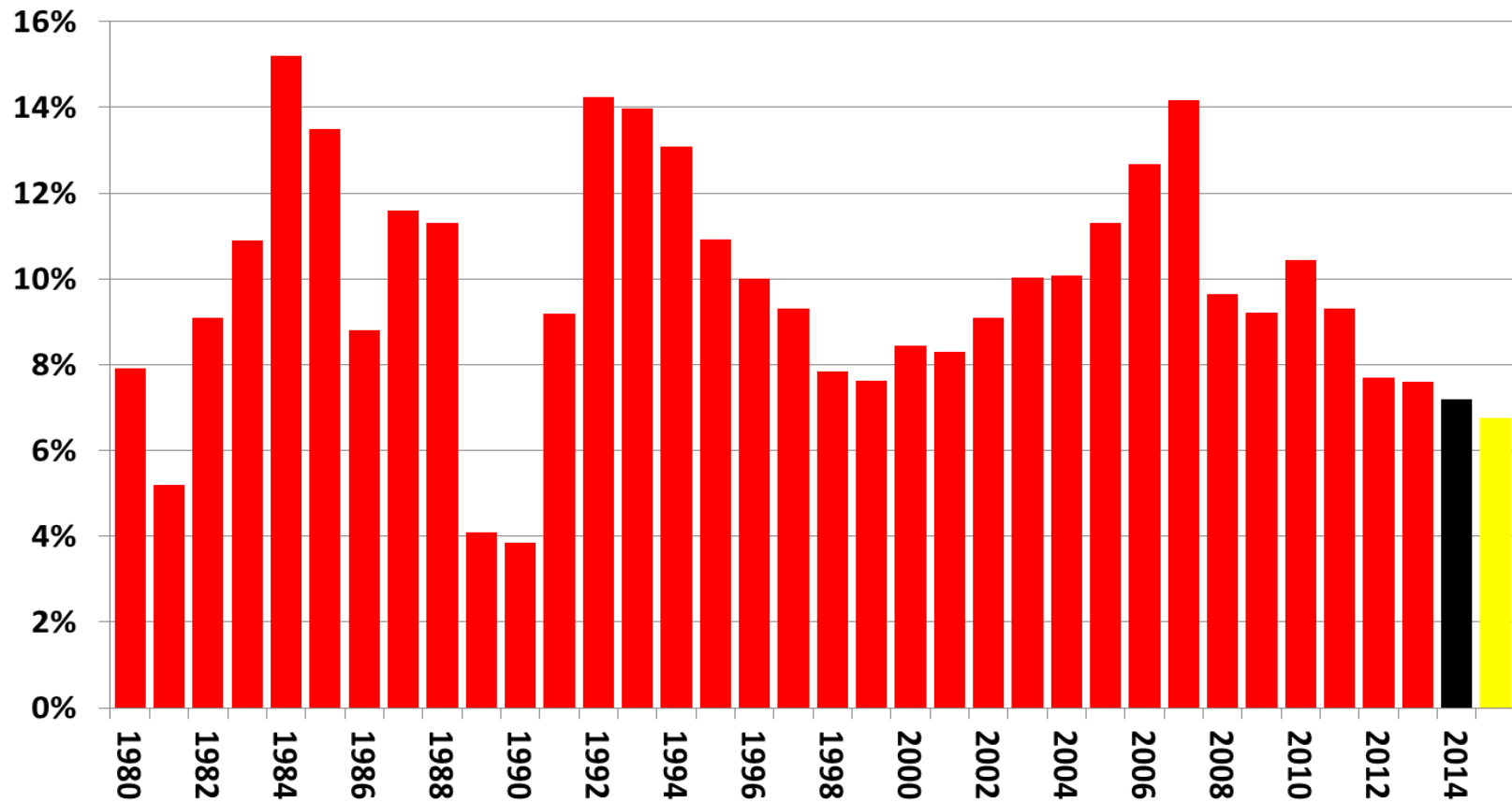


High Minimum Prices keep China oversupplied with corn into 2017?

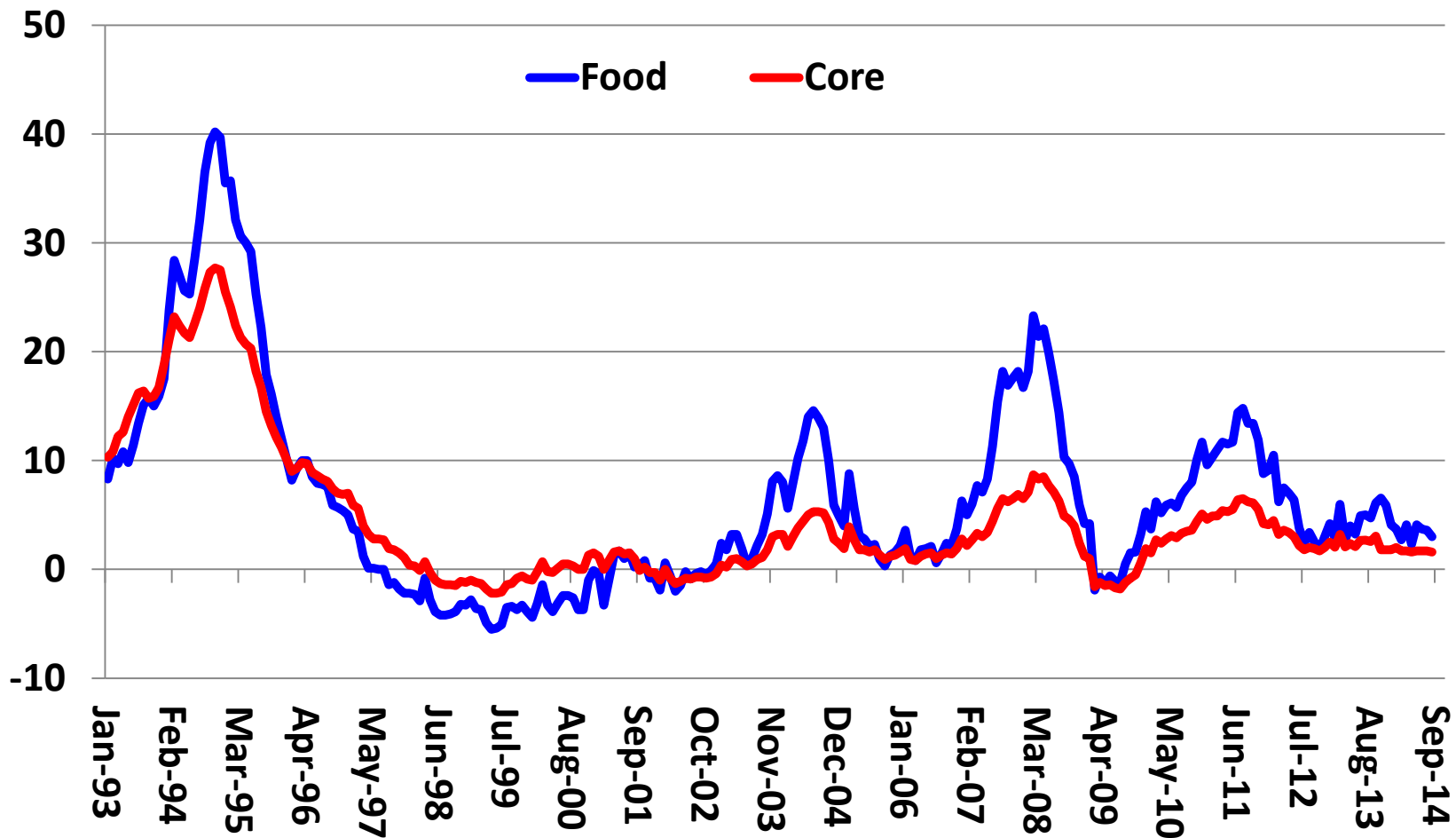


Chinese GDP – Slowing! 7.2%

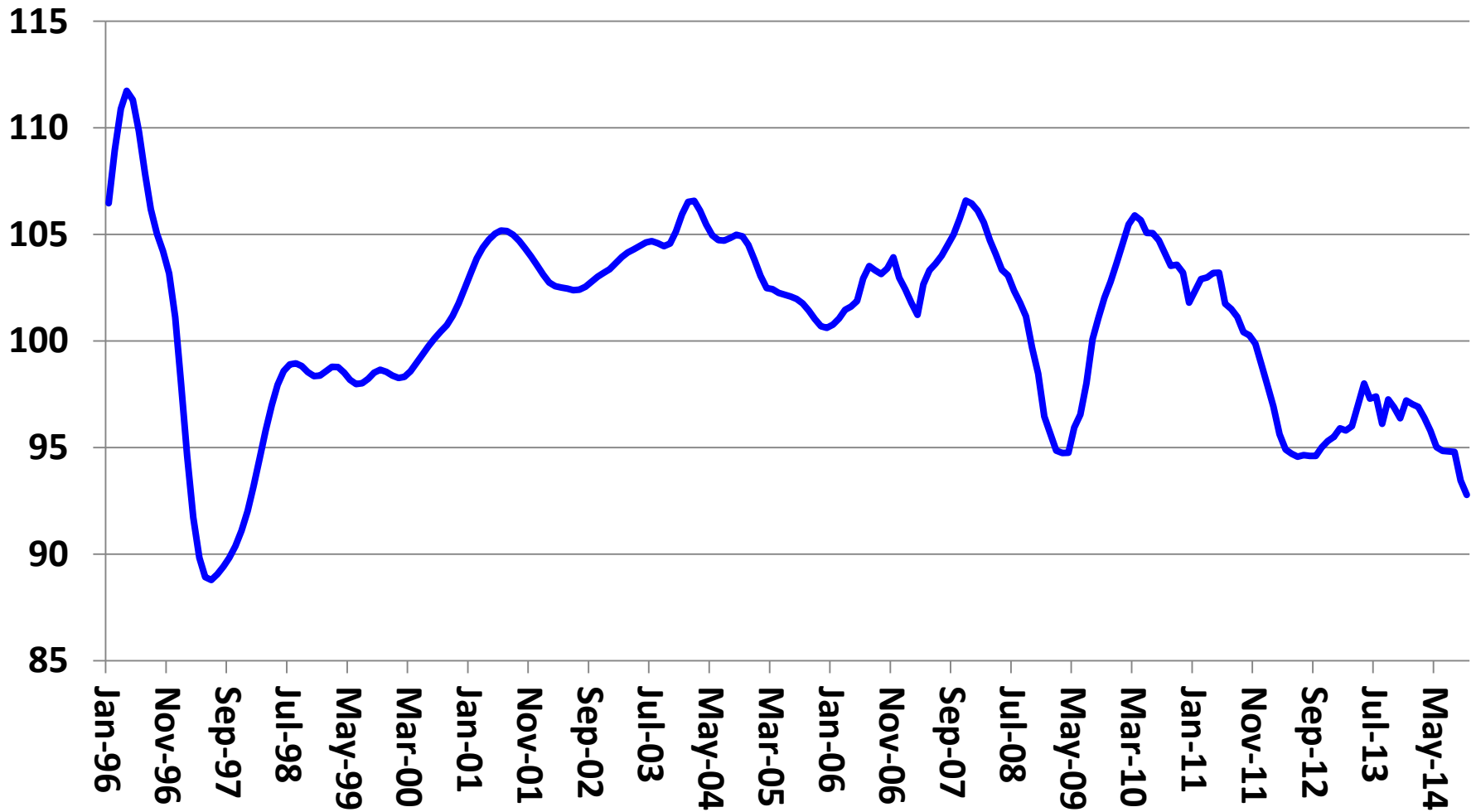
GDP in 2014 as Exports Slow



Chinese Core and Food Inflation Index

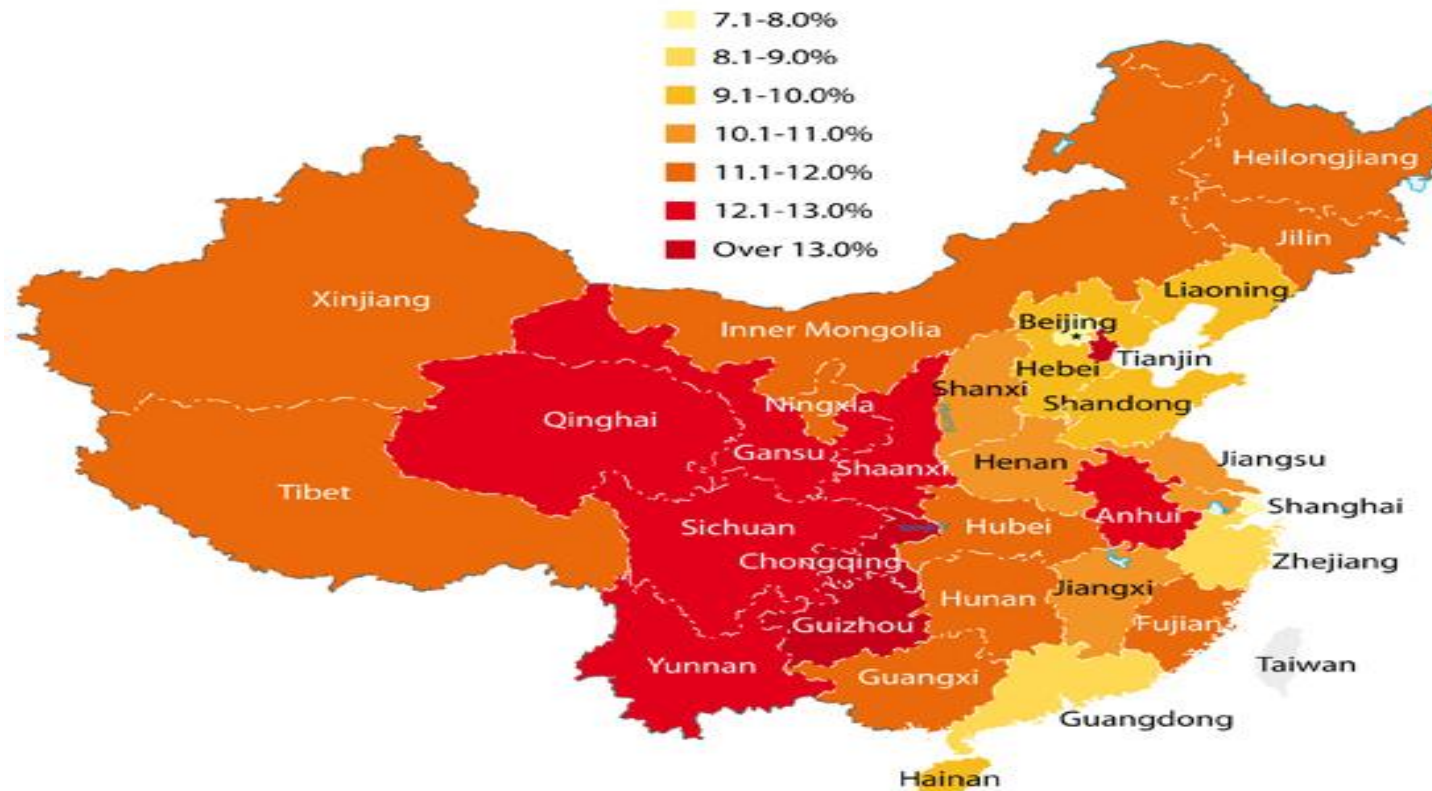


Chinese Real Estate Climate Index

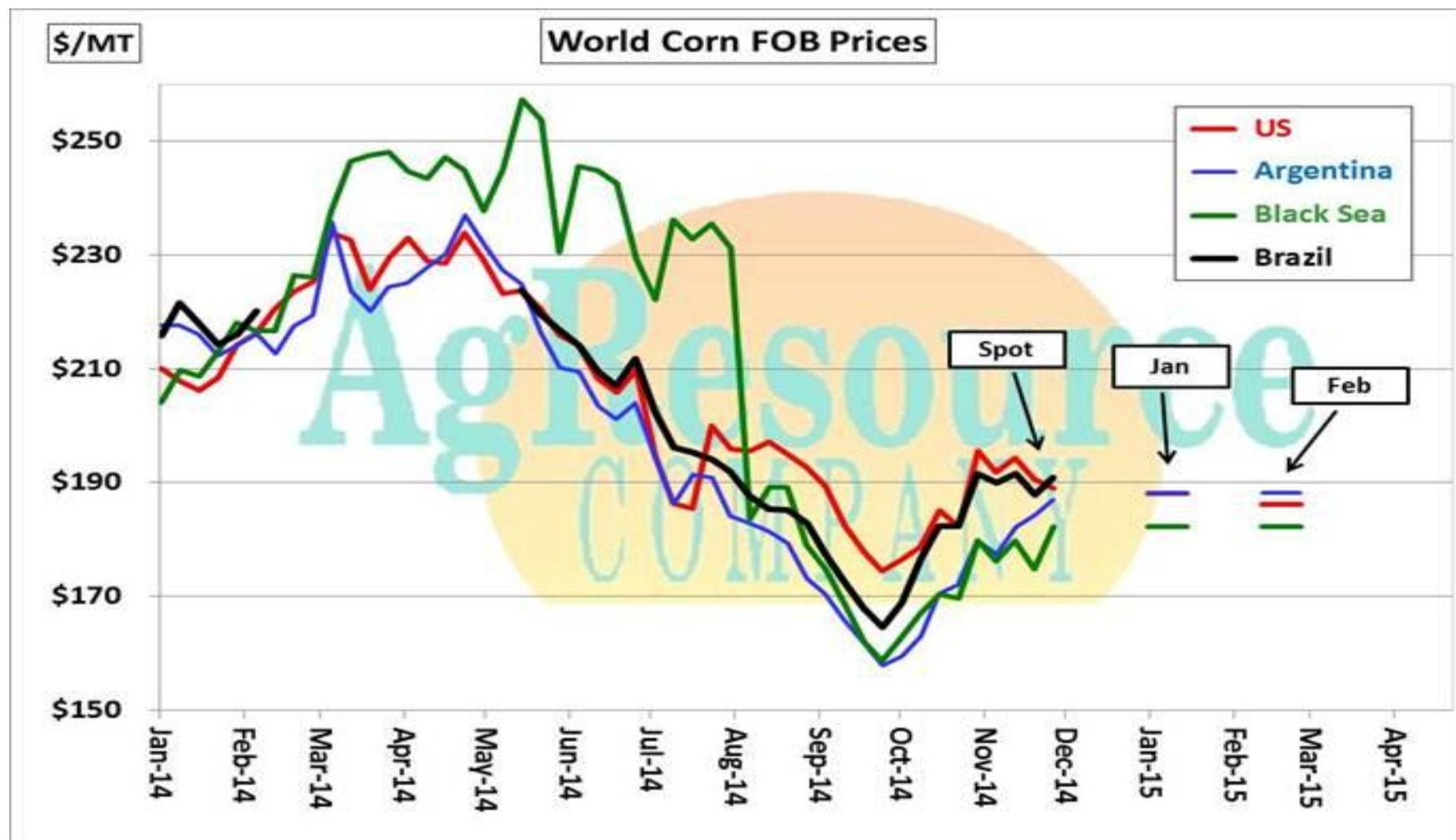


GDP in Coastal East Slowing!

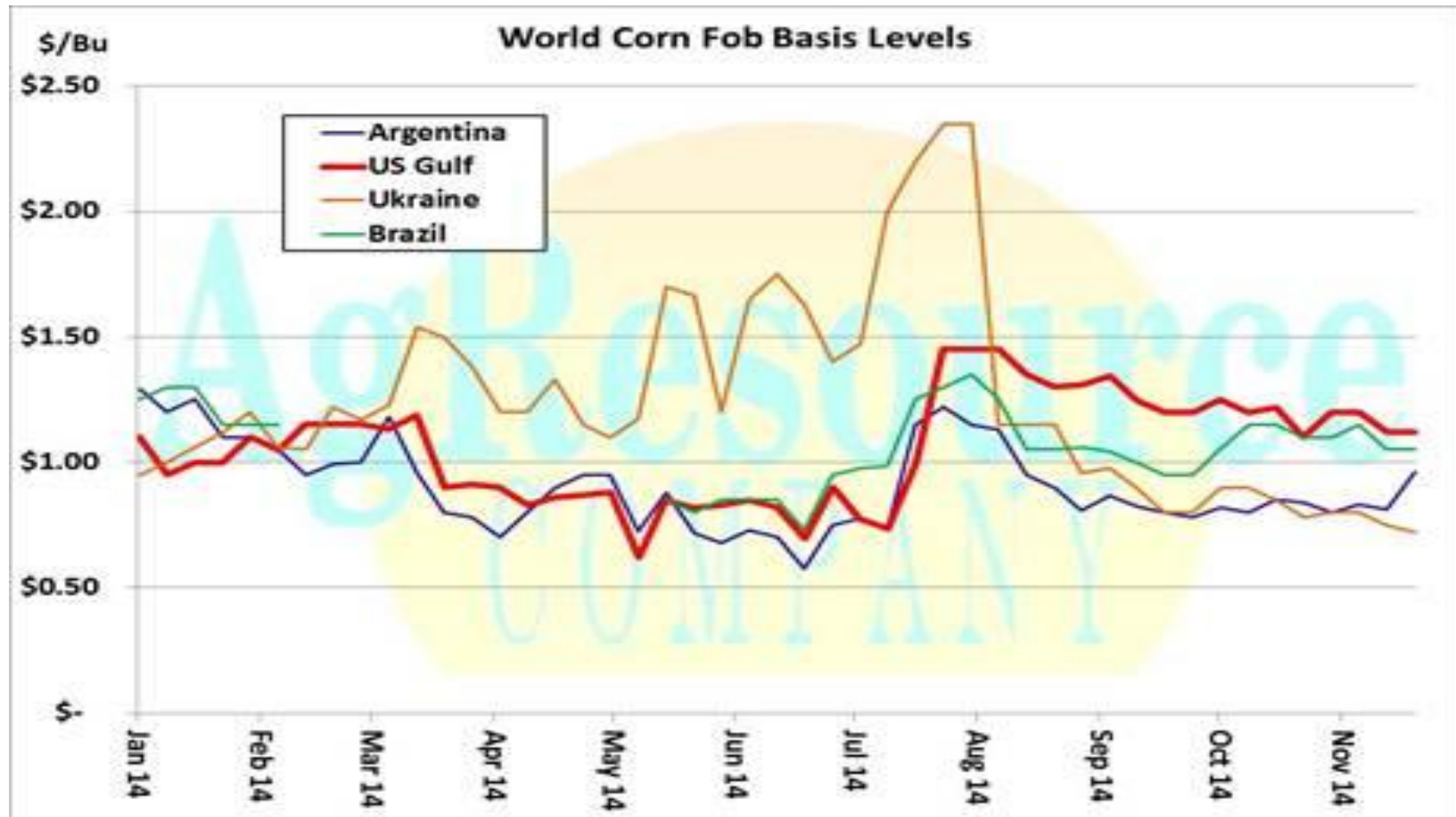
China's Provincial GDP Growth Rates in 2012



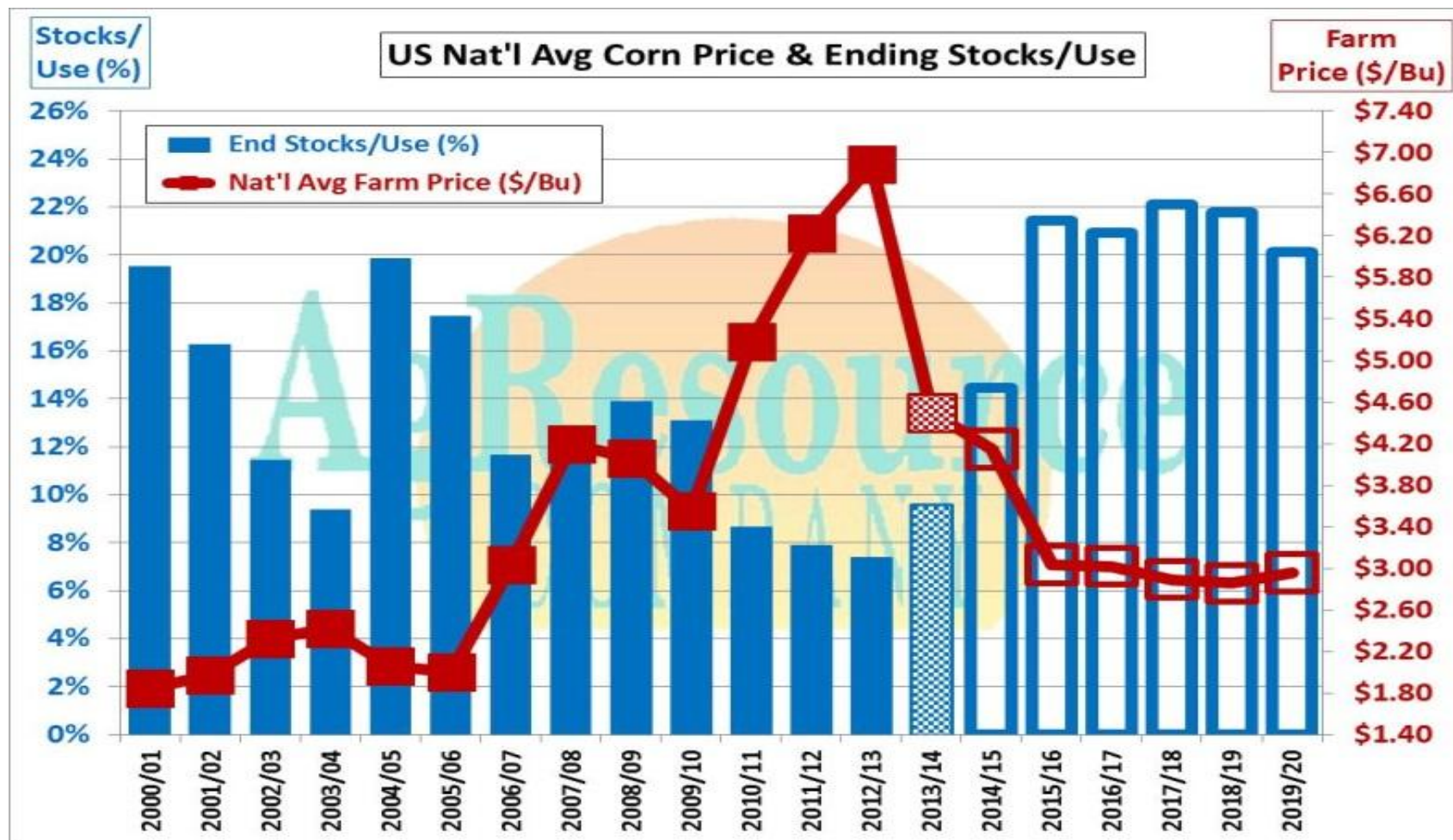
World Corn FOB Prices to Trade Sideways in a range.



Basis has narrowed, meaning its up to freight costs to determine origins



Average Corn Price to Hover at \$2.70-3.90 into 2020?



World Grain Stock Increases – Key Points!



- The world Biofuel Industry is mature. No new corn based ethanol plants are under construction in the US/EU – ethanol consumption has reached the blend wall!
- Outside of the record large trade of soybean trade to China - the world lacks a bullish demand driver. This is a much different landscape than the prior bull period from 2006-2012.
- Black Sea to remain the world's largest grain exporter on quality and quantity. The world to ramp up wheat and oilseed production in 2015 amid the falling price of feedgrains. World farm profitability is curtailed as seed, fertilizer and transit costs remain high.
- South America to produce record large soybean crops in 2015, but cut their production of corn/wheat.
- Its too early to make any comment on Russian 2015 wheat production with economic strong incentive for spring planting and concern for winter wheat and cold weather.
- World 2015/16 wheat production looks similar to 2014/15.
- LASTING BULLISH TRENDS NOW HINGE UPON RISING CALORIC INTAKE BEYOND THE 1.7% ANNUAL GAIN THAT HAS BEEN EVIDENT SINCE 1990! Or a supply dislocation such as adverse weather. A readjustment period lies ahead for world grain/oilseed farmers for the next 3-5 years.