

High Feed Prices: When will they Moderate?

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GRAIN AND FEED



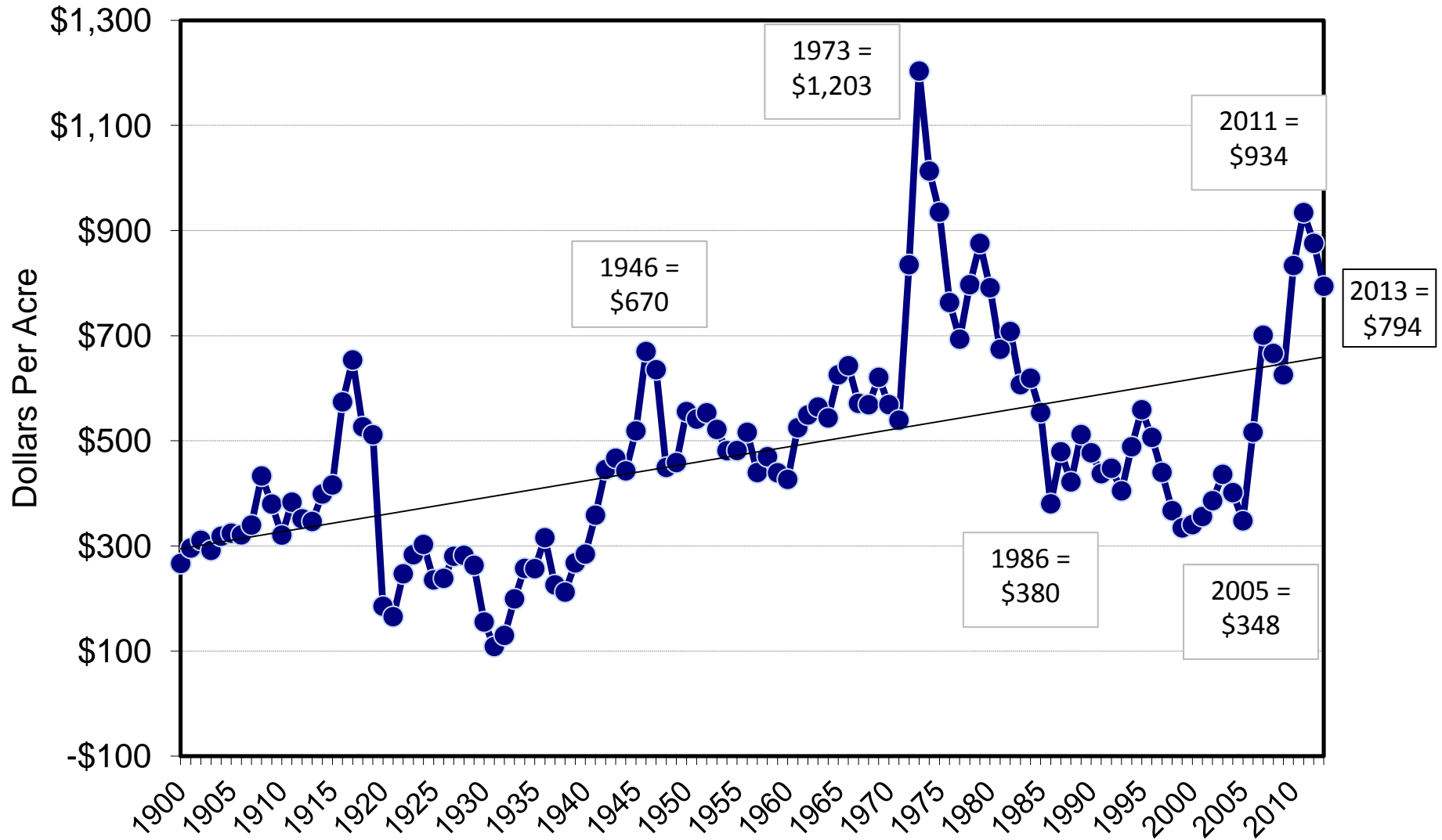
Economic Shock



Transition to
New-Equilibrium



Figure 11: Real U.S. Corn Revenue Per Harvested Acre: 2012 = 100



*What HAS BEEN
Driving the Ag
Economy???*



ZC - Corn - Monthly Nearest OHLC Chart



High Anxiety!







#1 Global Biofuels Policy



**# 2 Rising Incomes in
Developing Countries:
Soybean Purchases by China**



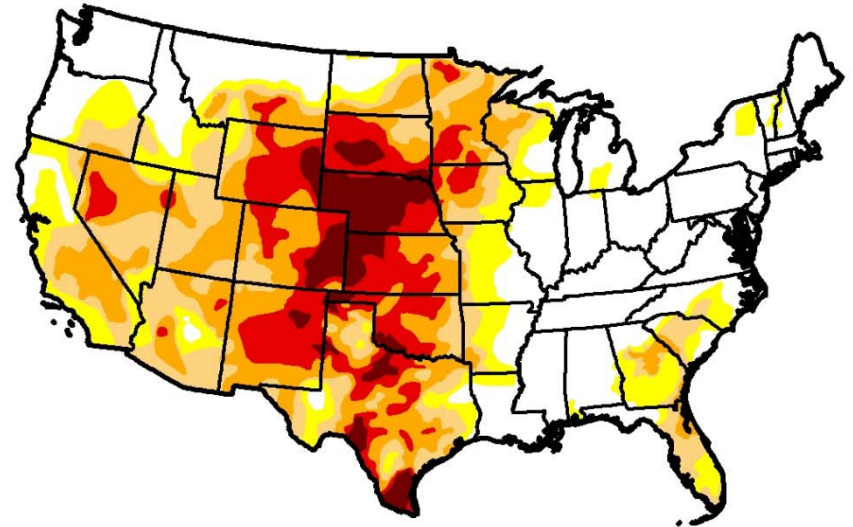
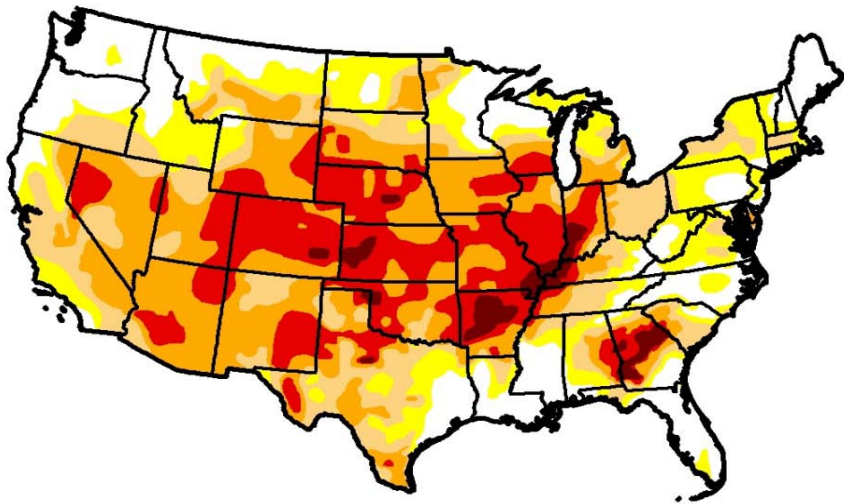
**# 3 Under-Investment in
Agricultural Production
in the Developing World**

Picture: Michigan State University

#4 Adverse Weather

July 24, 2012
64% in Drought

Today:
52% in Drought



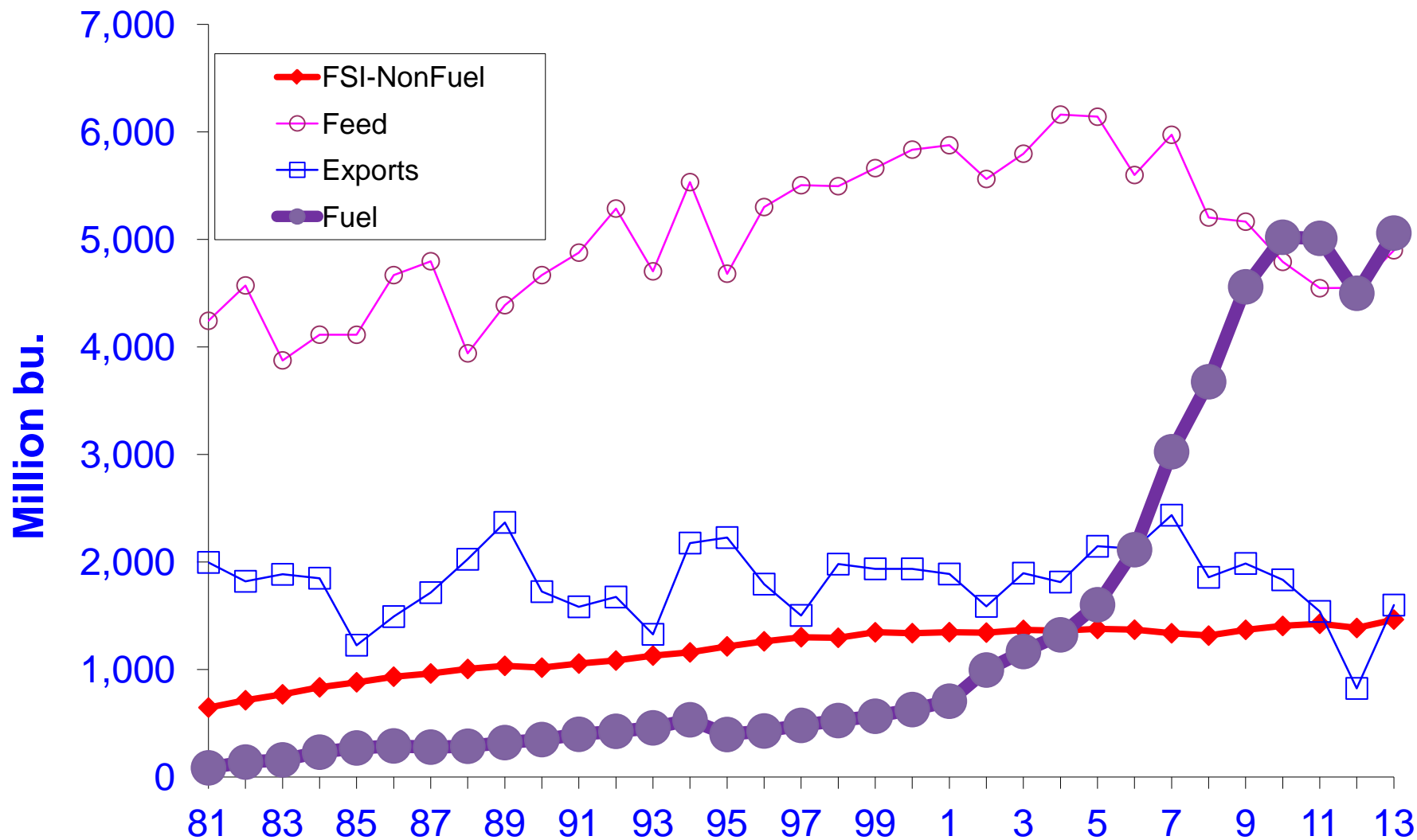
5 Macroeconomic Events

- U.S. & World GDP Growth
- Exchange rate of the \$
- Interest Rates

DX - U.S. Dollar Index - Monthly Nearest OHLC Chart

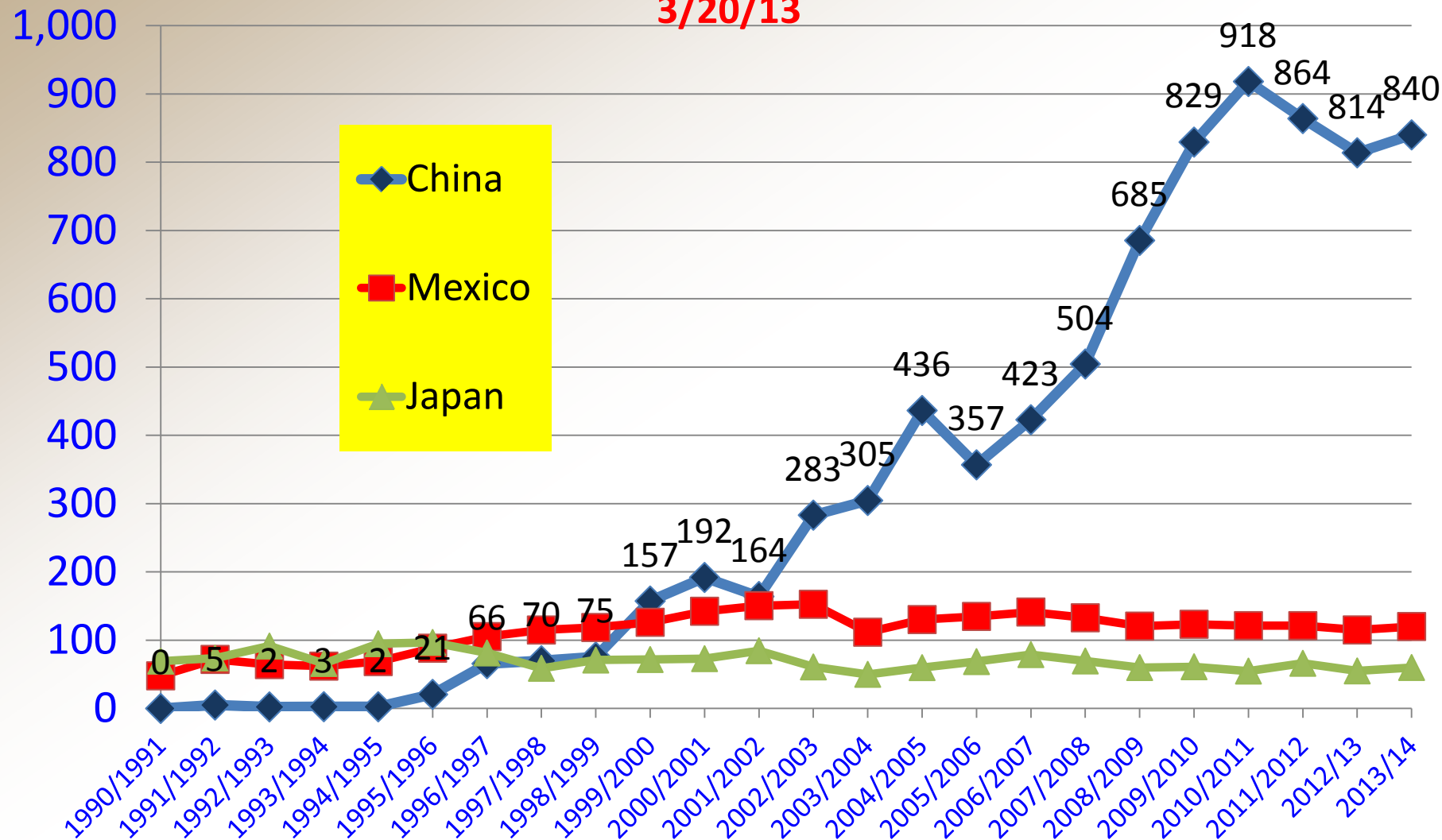


Corn Use: USDA

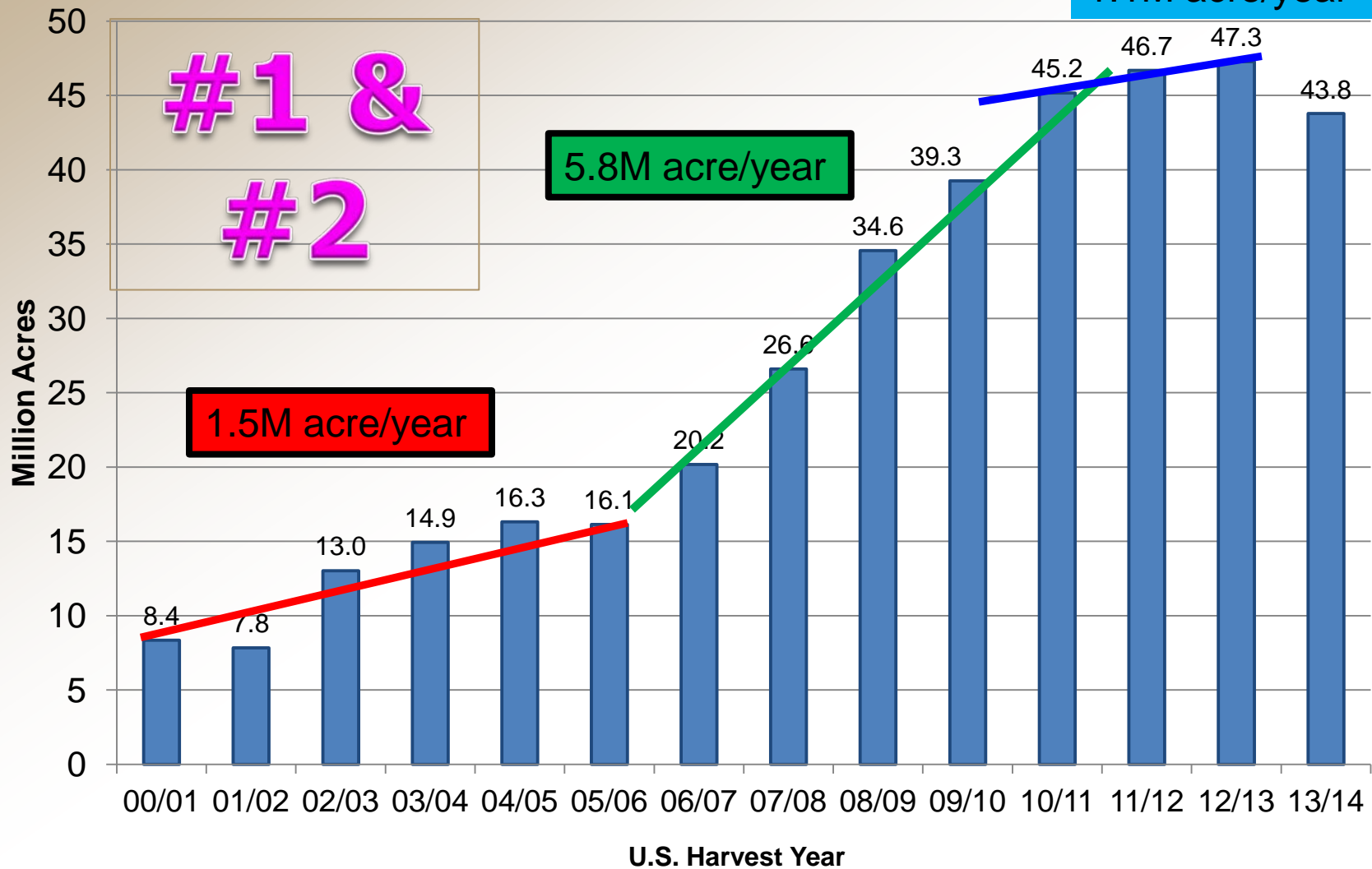


Soybean Imports from the U.S.: 1990/91-2013/14 (Mill Bu.)

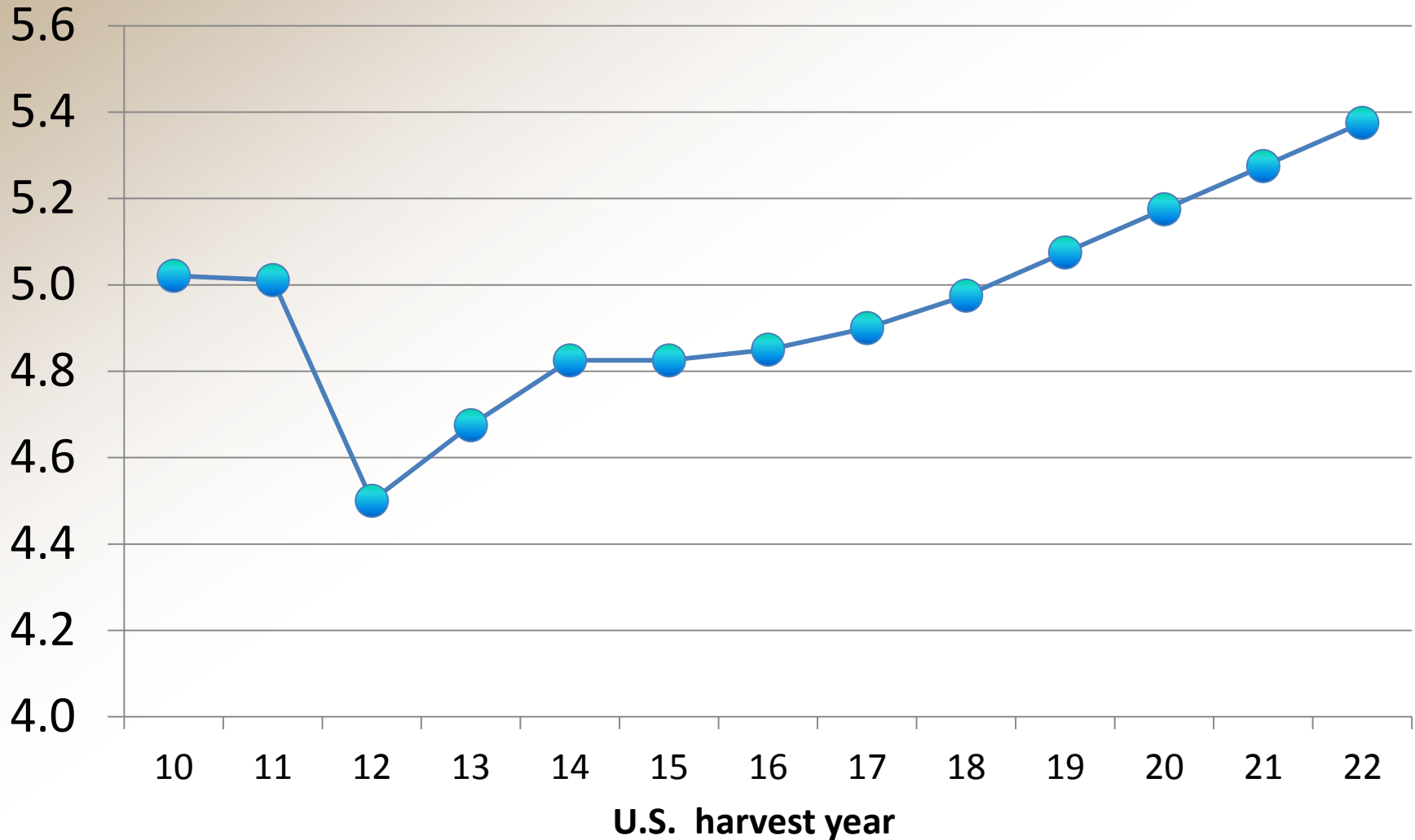
3/20/13



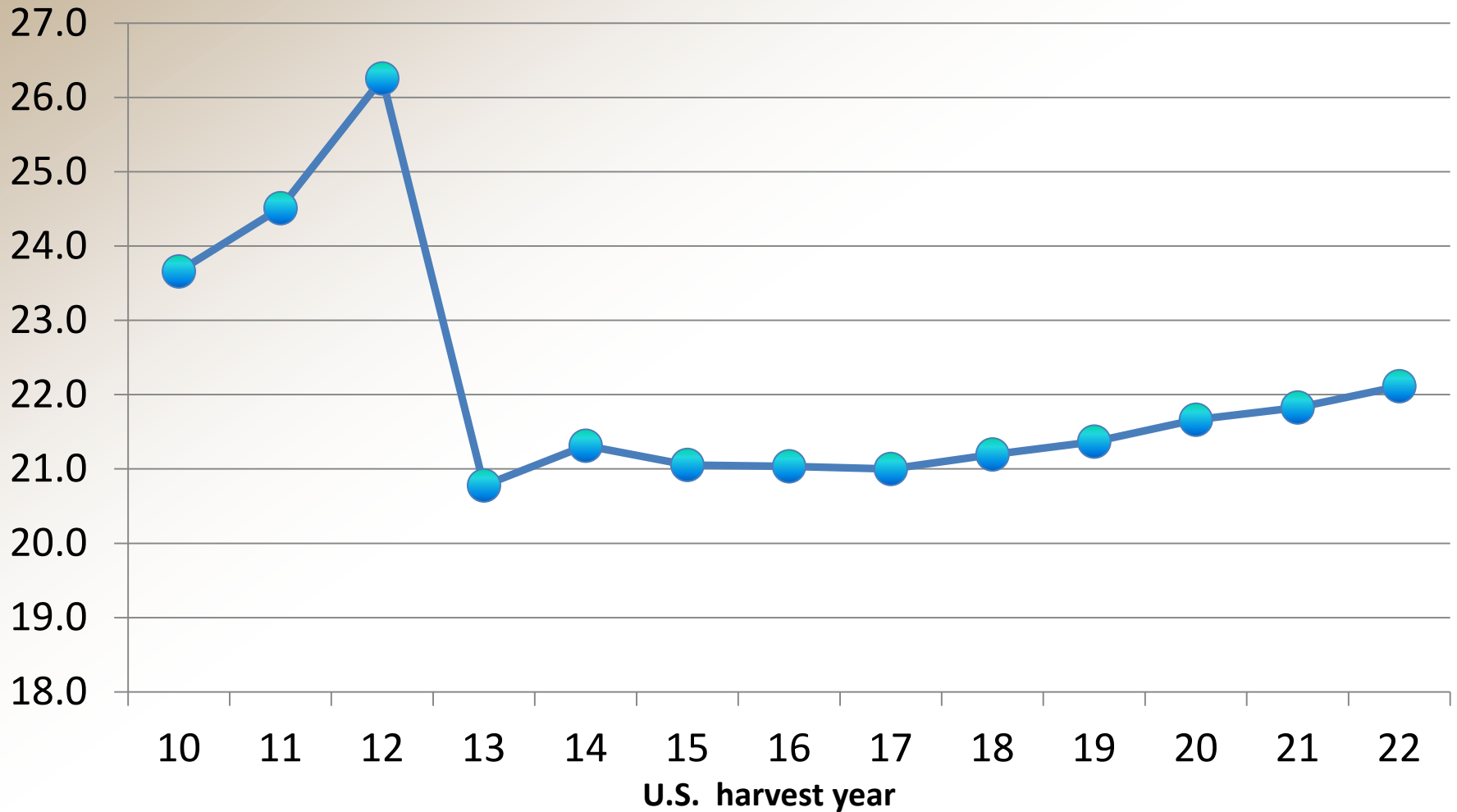
U.S. Acres Required for Chinese Soybean Exports; Ethanol (ddgs adjusted); and Chinese Corn Purchases



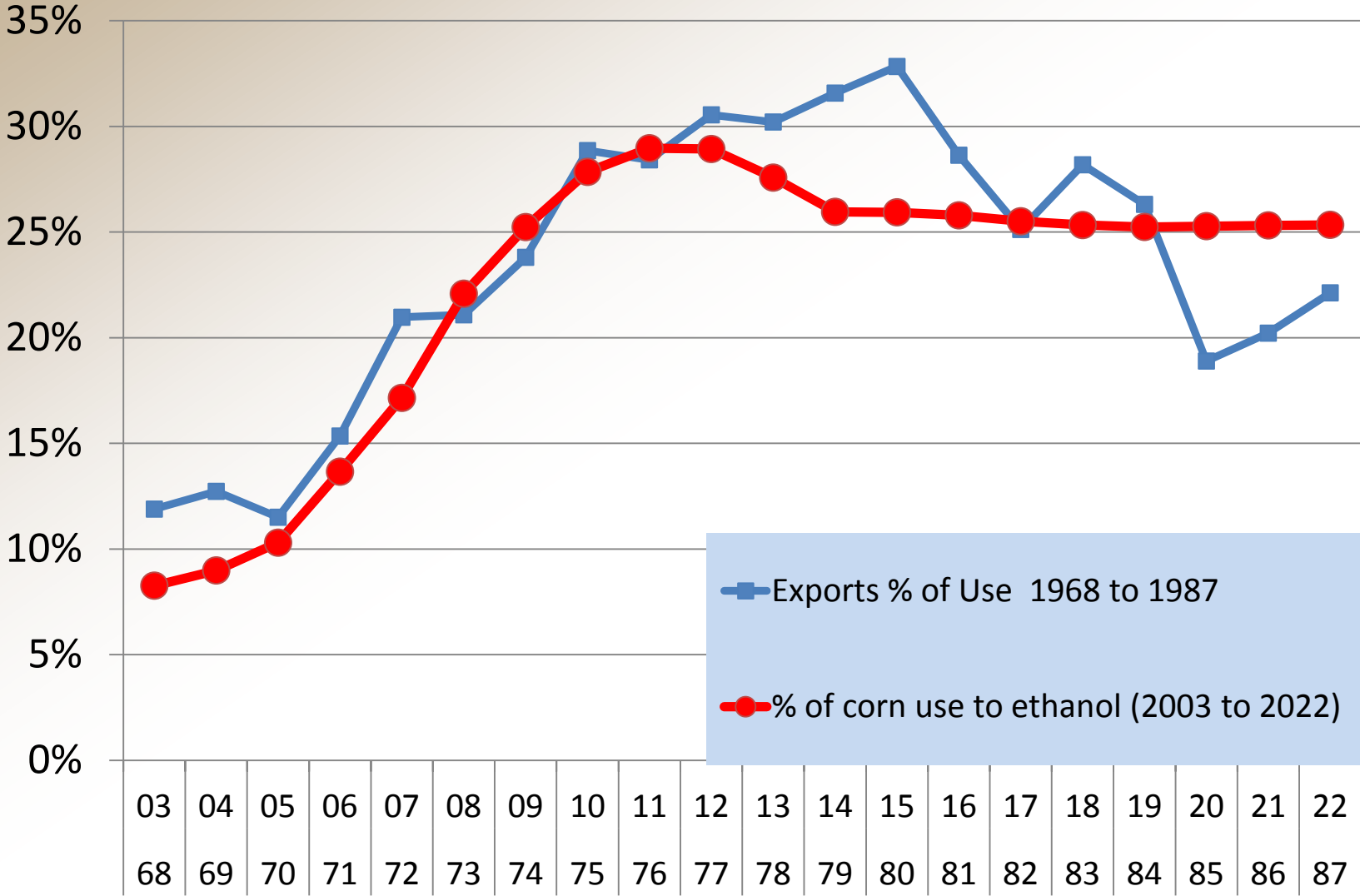
USDA Projected Corn Use for Ethanol (Billion Bushels)



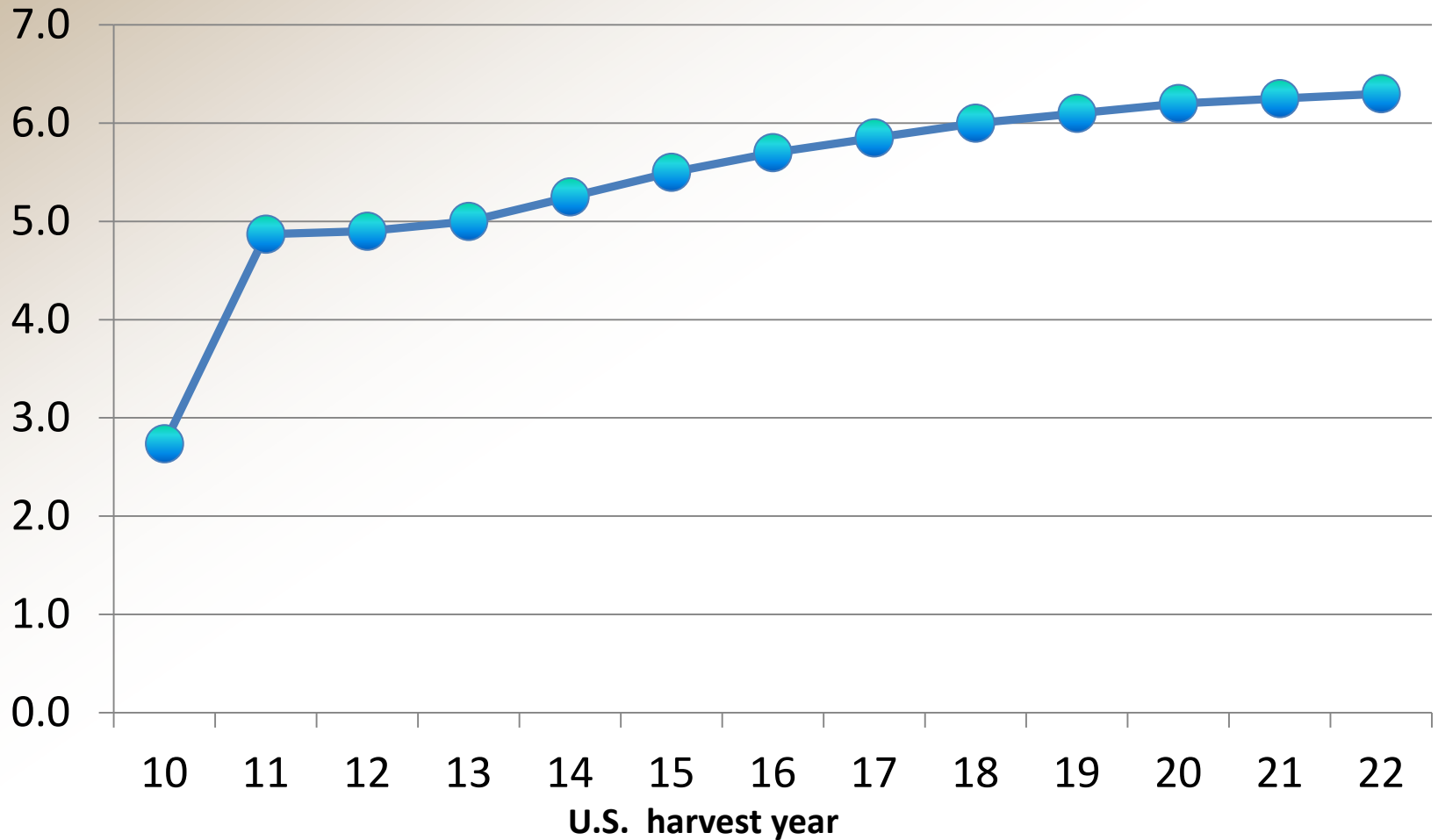
USDA Projected Corn Use for Ethanol (Million Acres DDG adjusted)



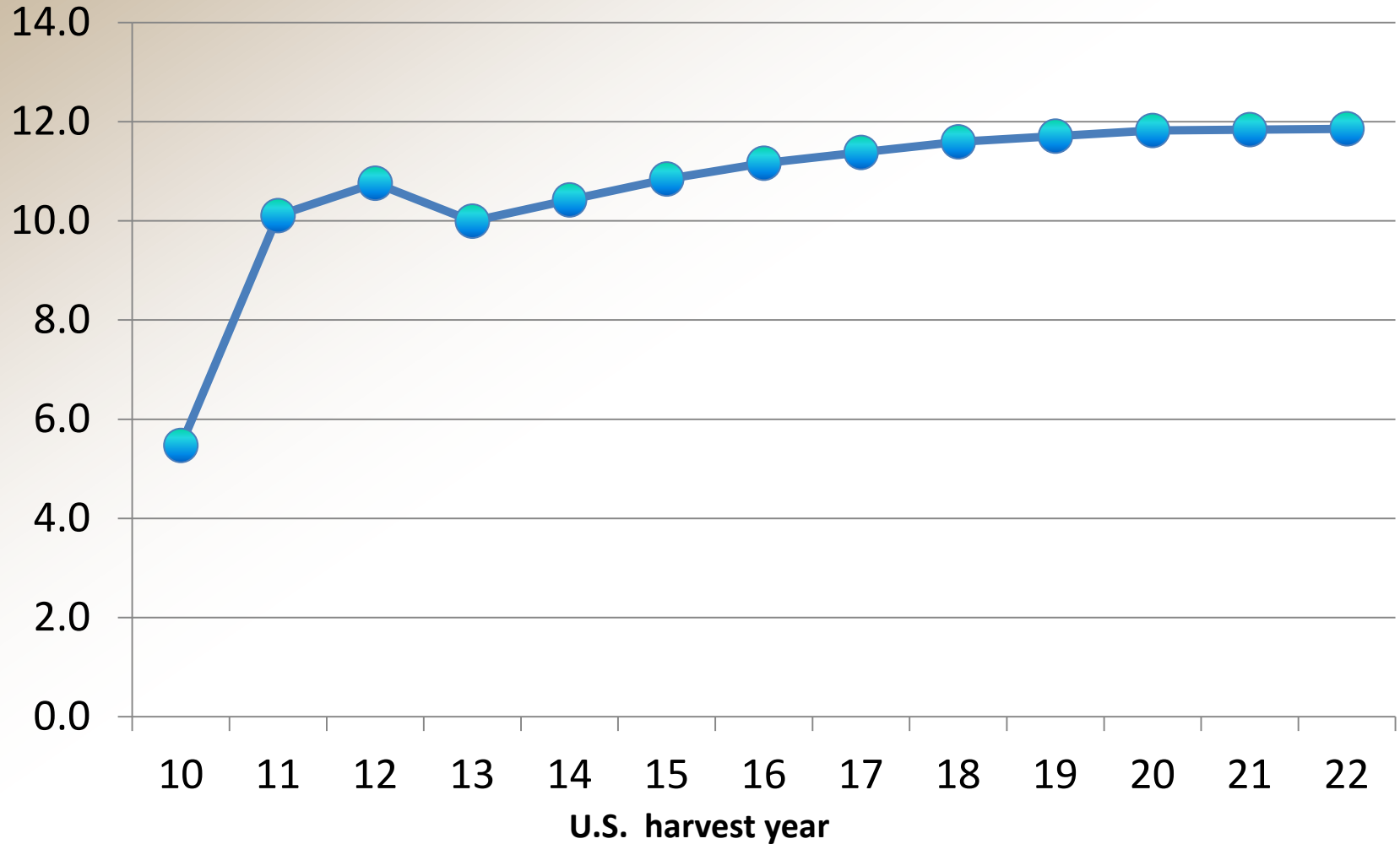
Exports and Ethanol as a % of Total Corn Use



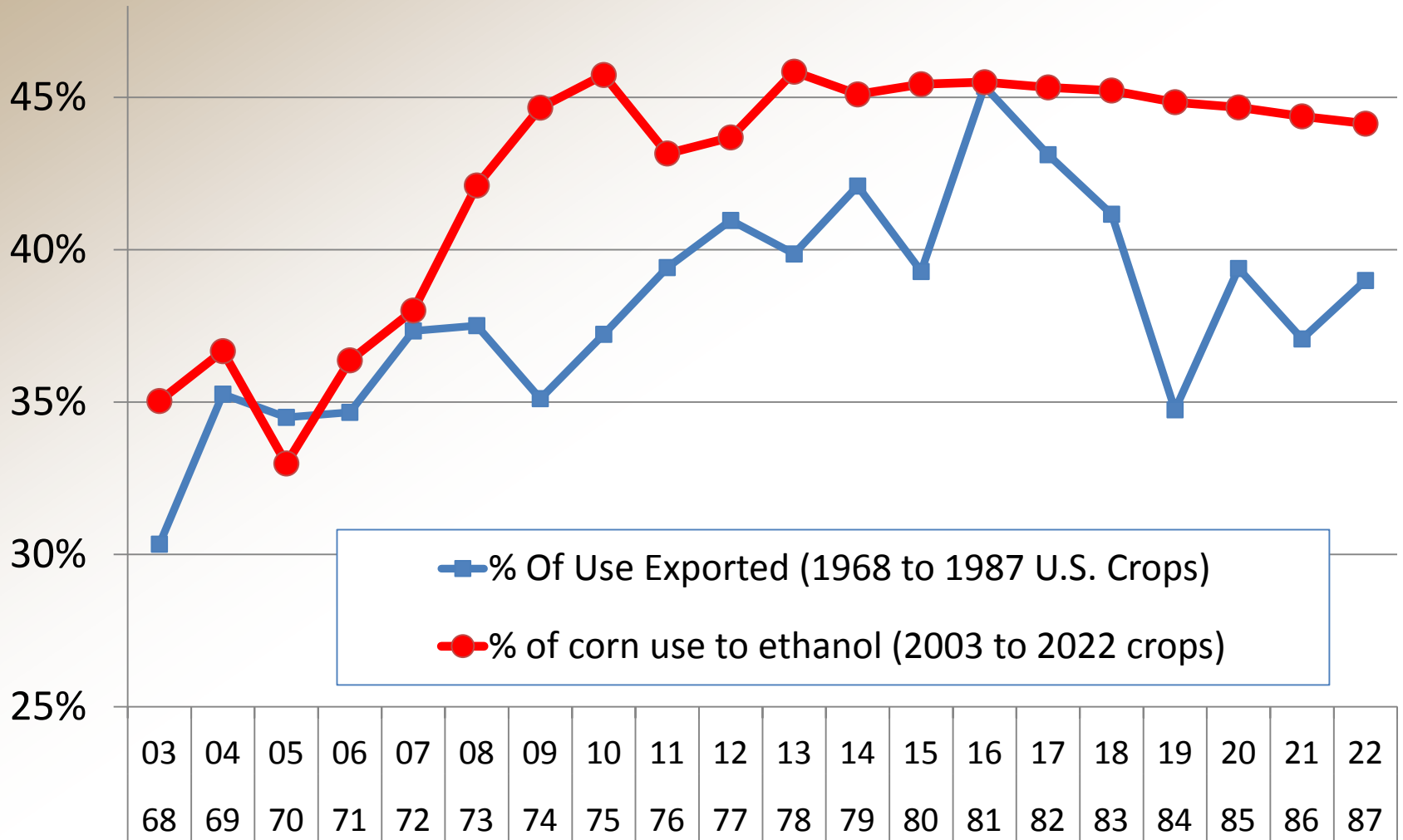
USDA Projected Soy Oil Use for Biodiesel (Billion Pounds)



USDA Projected Soy Oil Use for Biodiesel (Million Acres)



Soybean Exports as a % of Total Use



Supply Response to Meet New Demands

1. **Substitution** of area:

Shift from other crops into new demand crops

2. **Extensification** of area:

Bring new area into production

World

U.S.

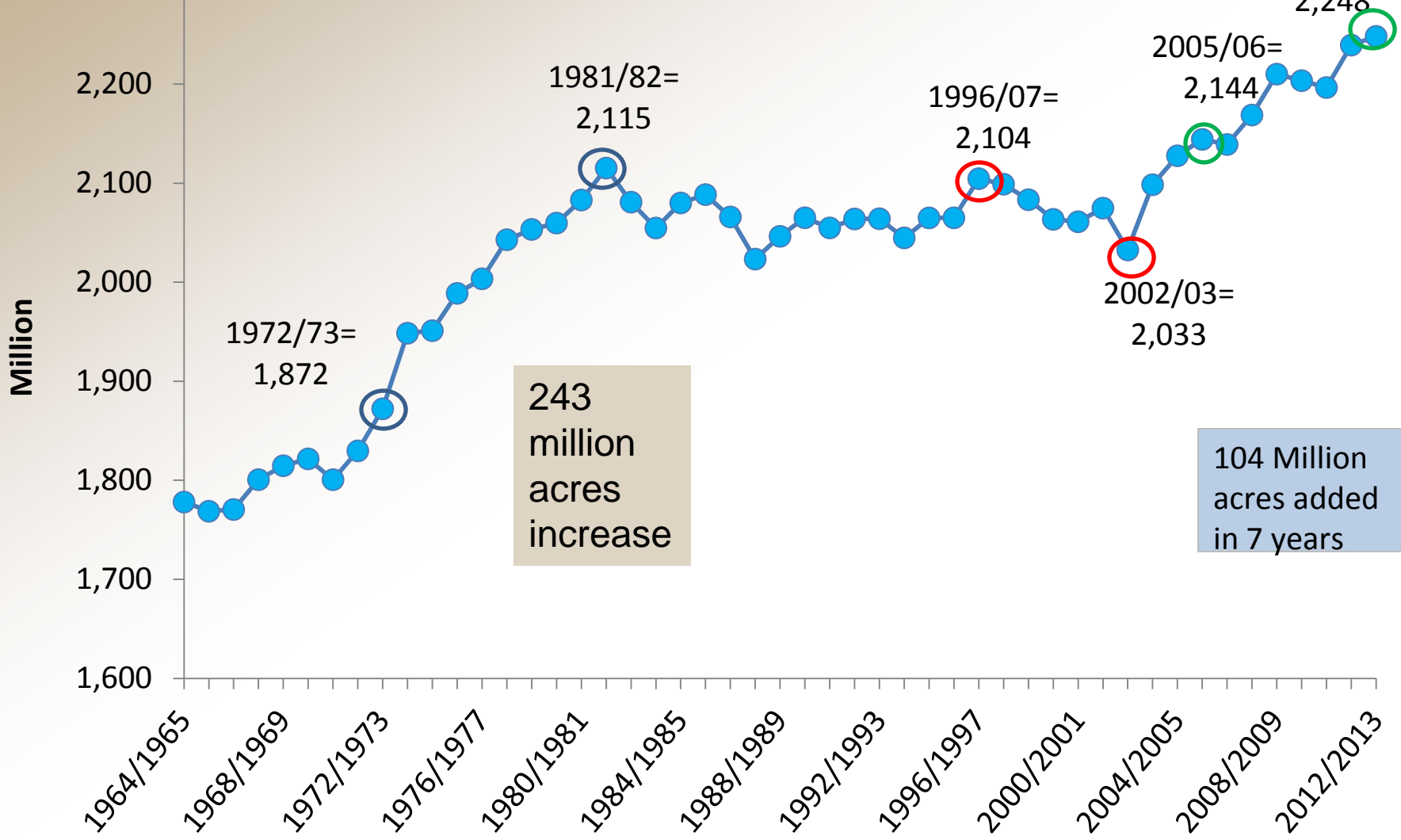
3. **Intensification** of production/acre

Enhanced input usage

Improved drainage

Irrigation, etc. etc. etc.

Figure 6: World Harvested ACRES 13 Major Crops Total: (Millions)



Change in World Harvested Area 2012/13 vs. 2005/06 (Million Acres)

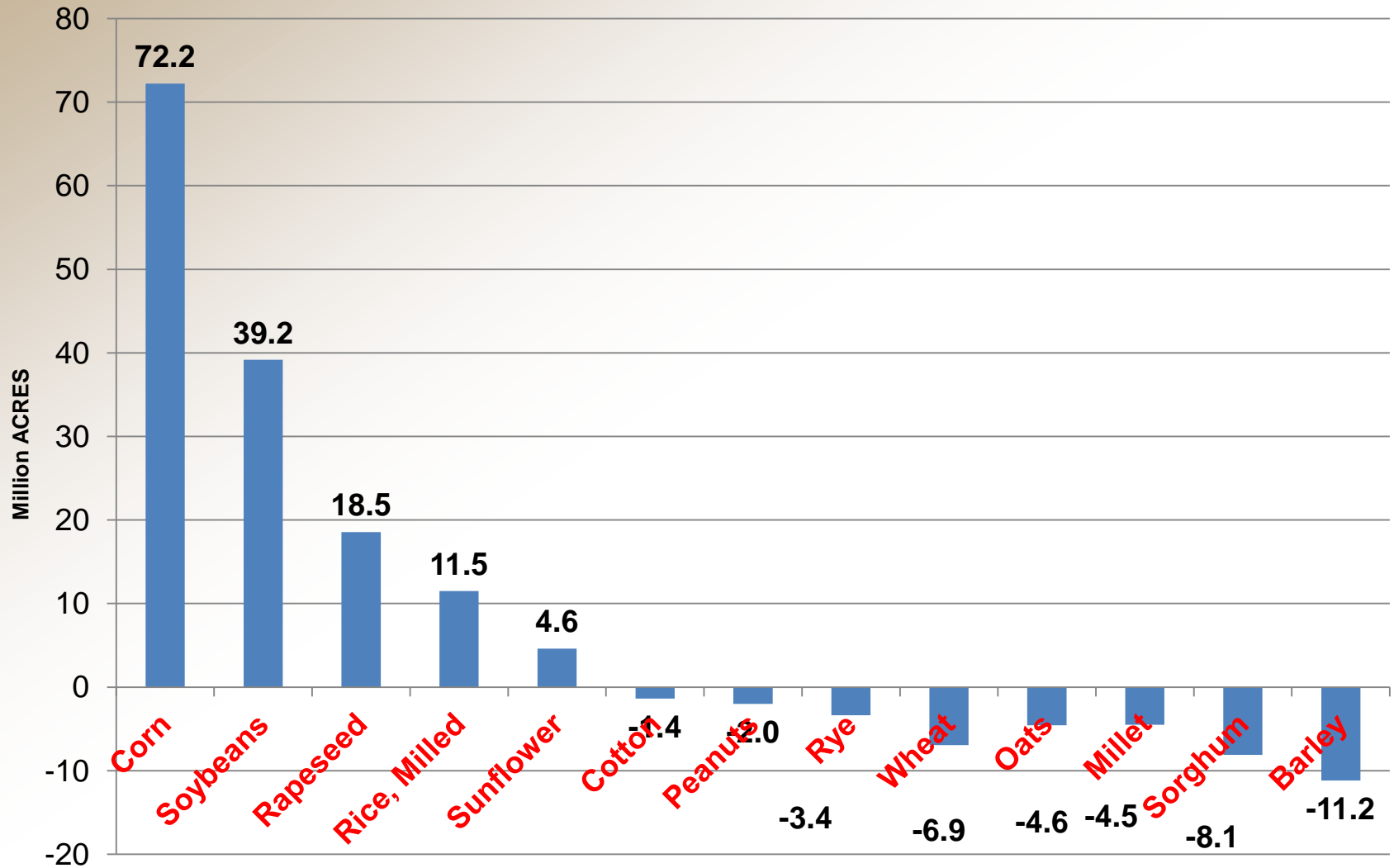
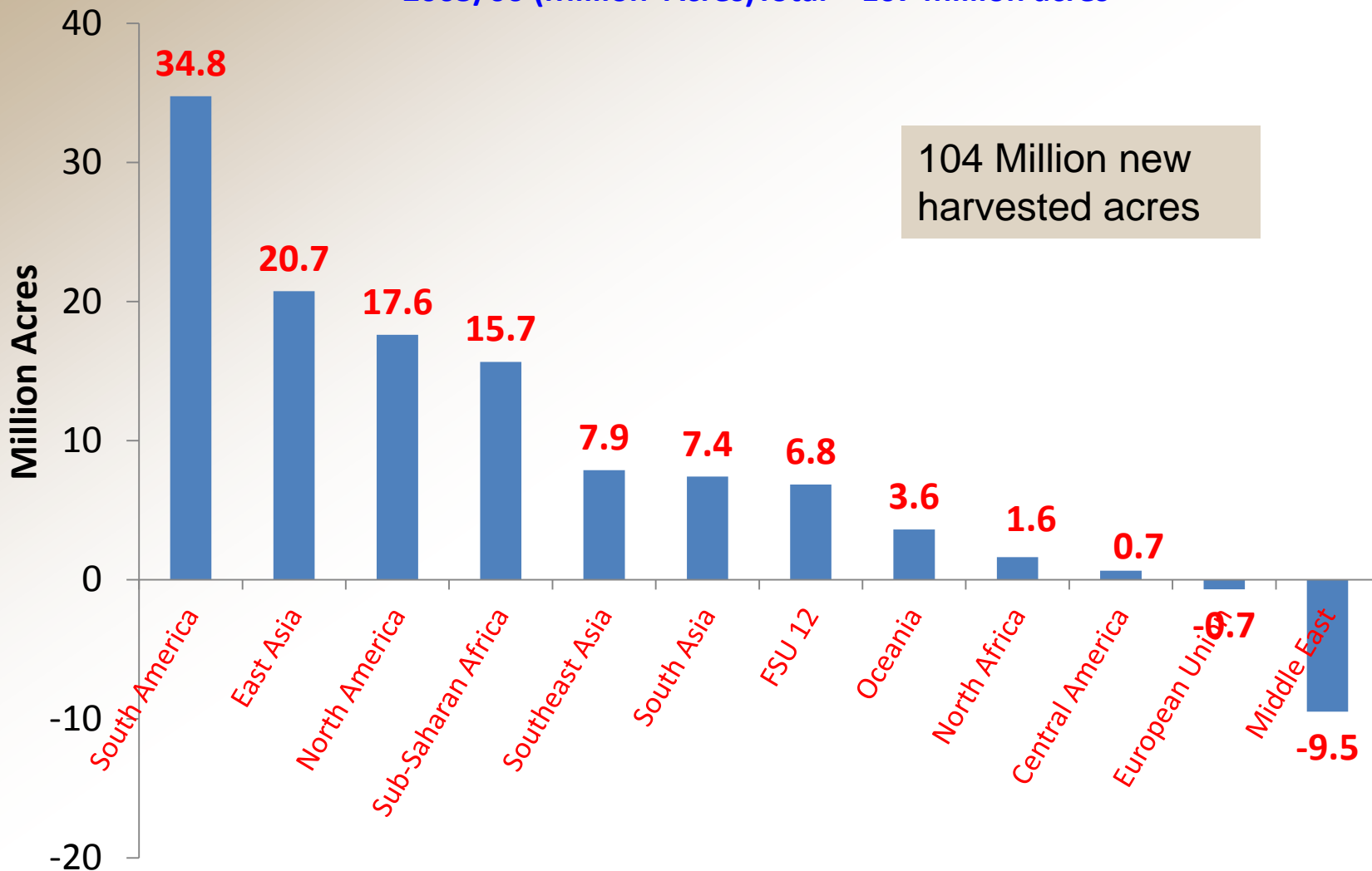
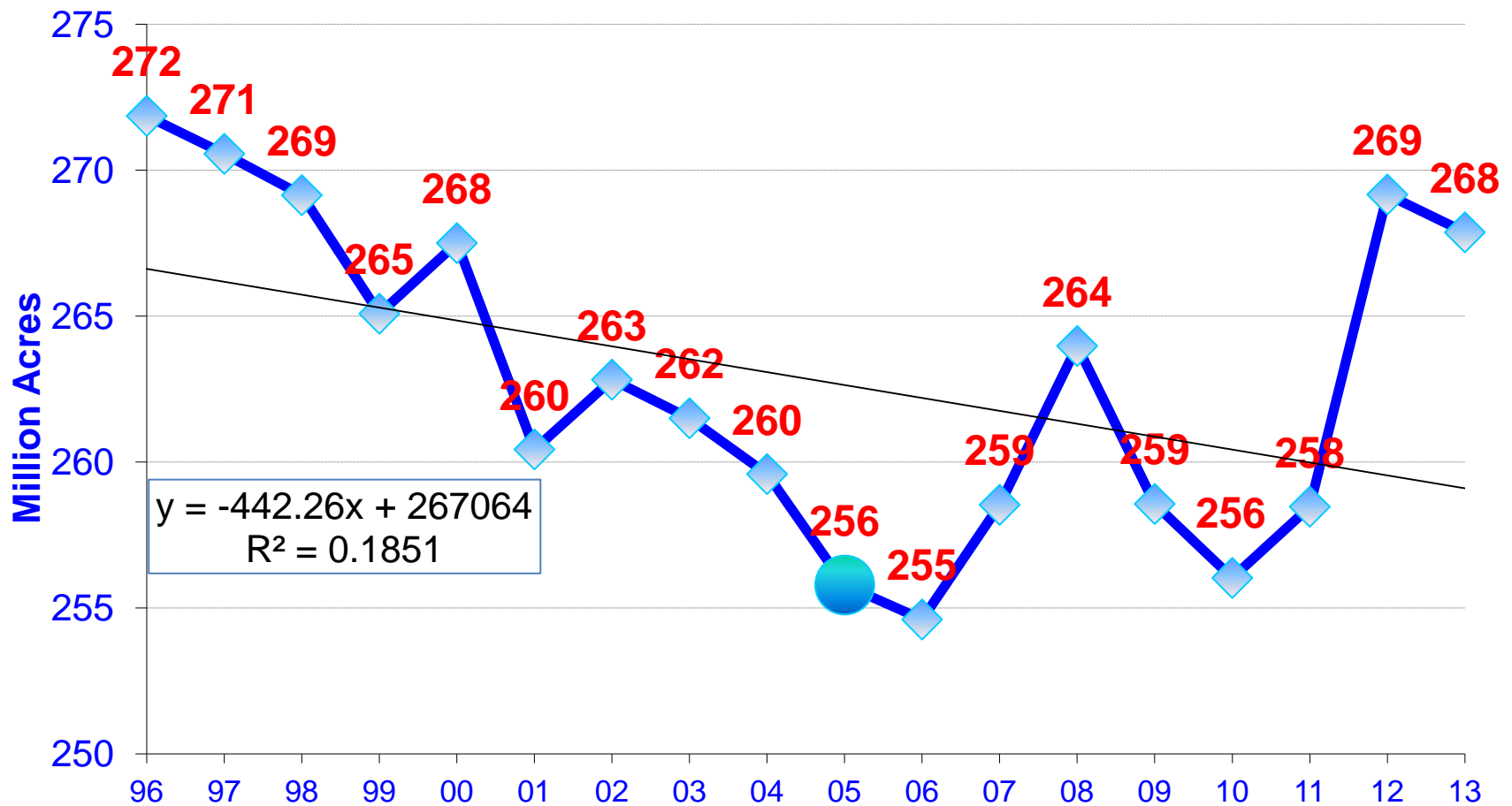


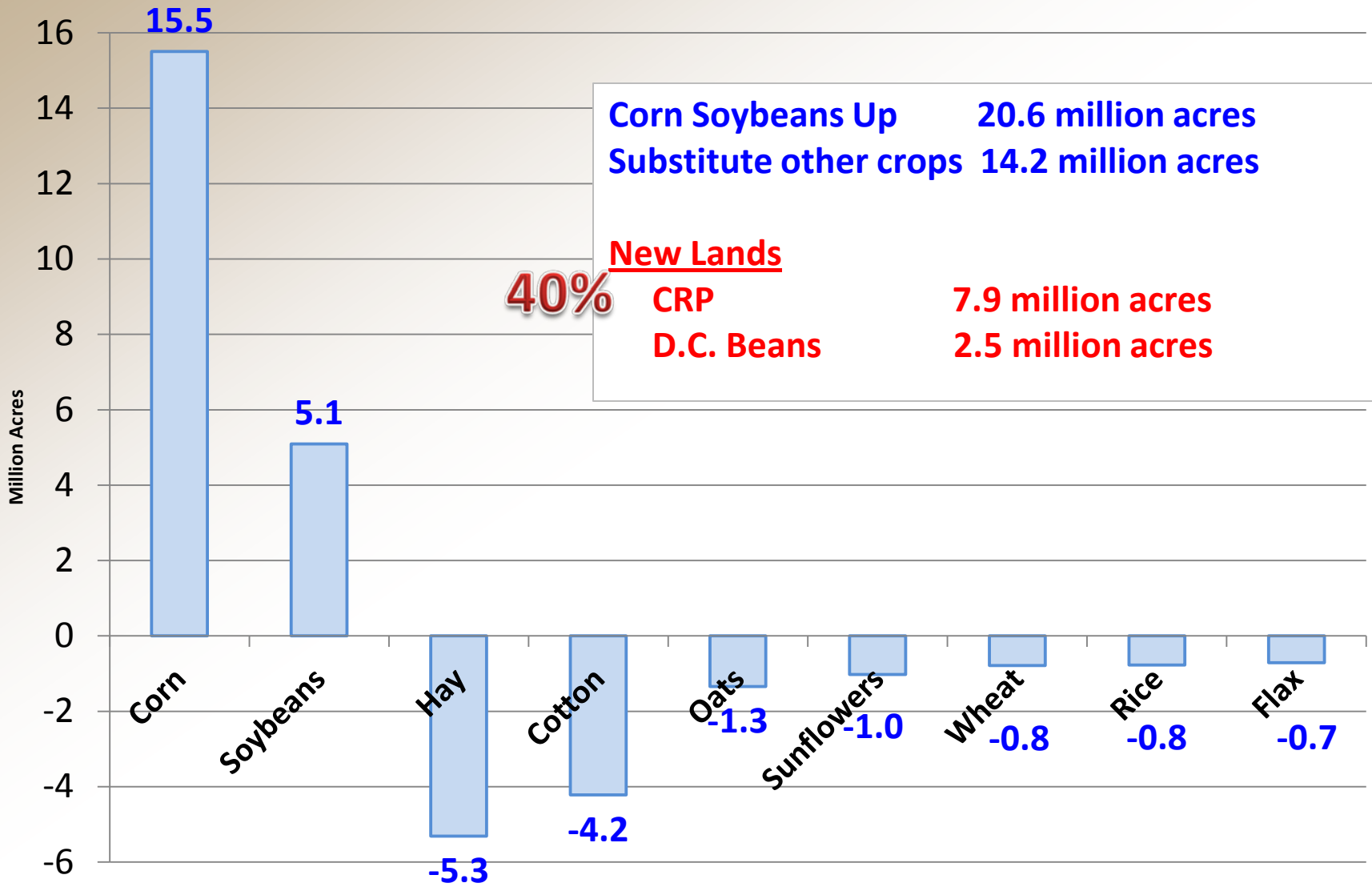
Figure 8: Change in Area Harvested in 13 major World crops 2012/13 vs. 2005/06 (Million Acres) Total +107 million acres



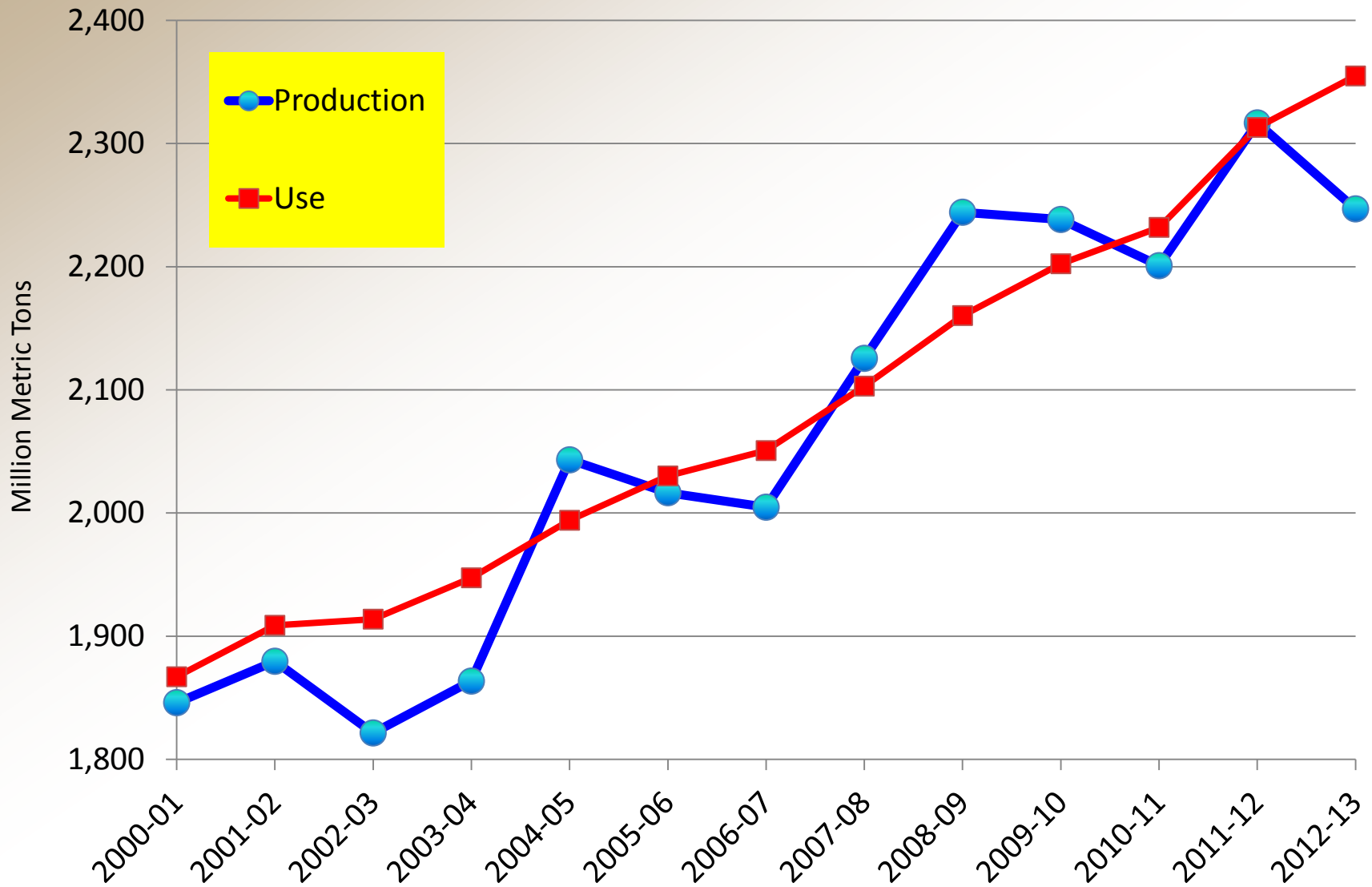
U.S. Acres: 17 Crops Since Freedom to Farm



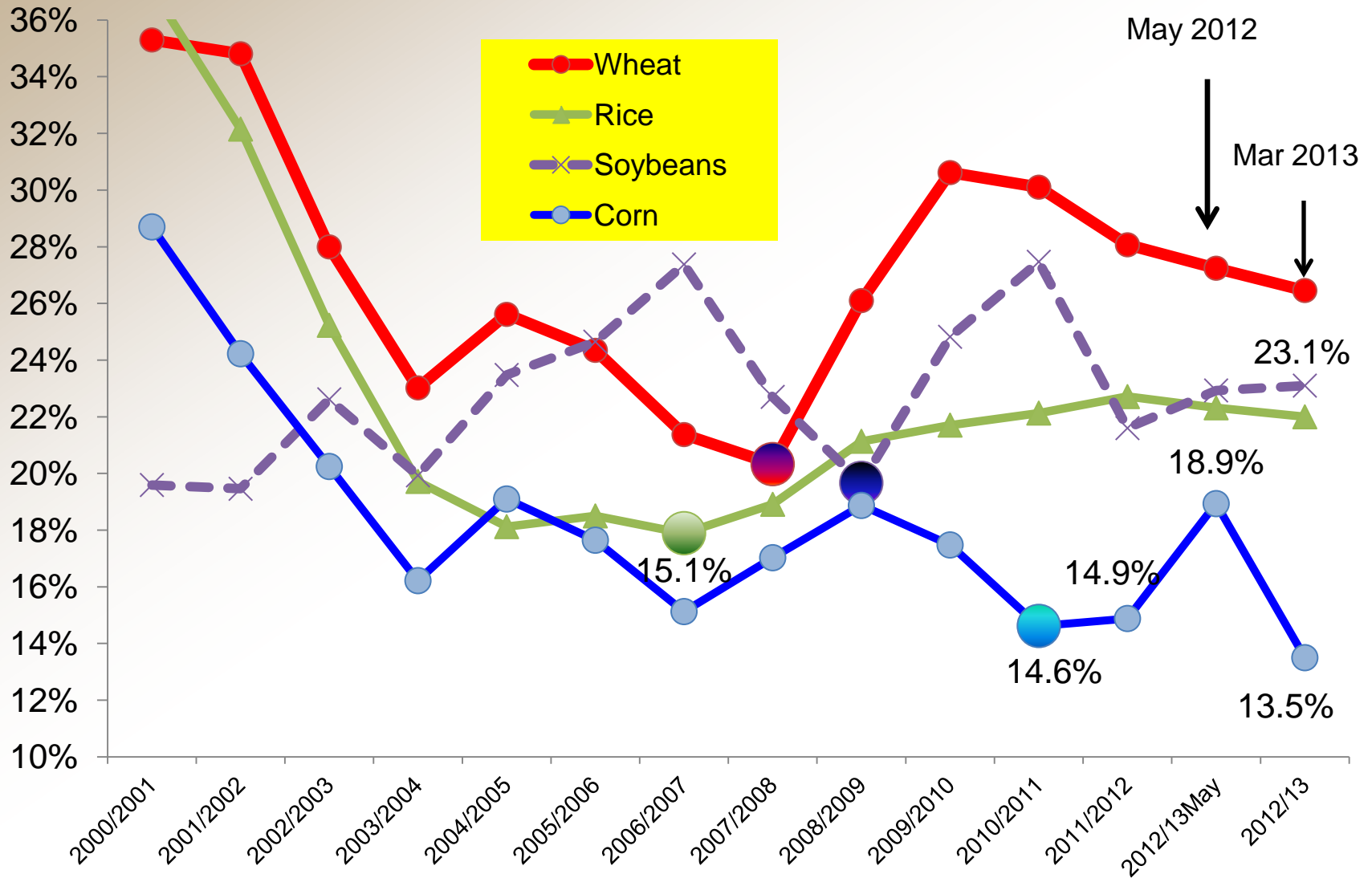
17 Crops Plus Hay: Change in U.S. Acres 2013 Crops vs. 2005 Crops



World Total Grains Production and Use



World Stocks to Use %: USDA May/Oct 2012



Key Questions????

What will weather be in 2013?

How will weather impact production and prices?

After 3 short production crops in the U.S.:

Where will crop prices settle out with normal production?



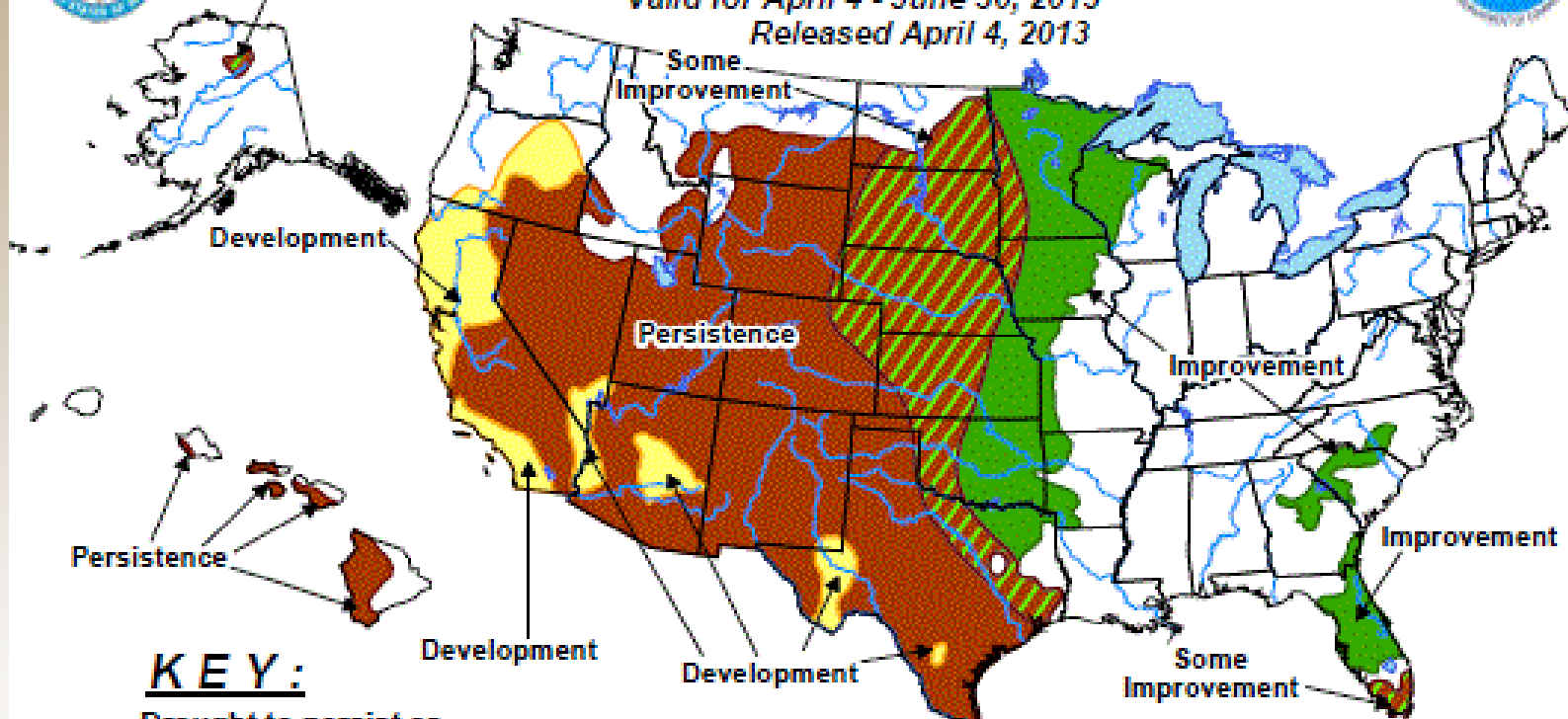


U.S. Seasonal Drought Outlook





Drought Tendency During the Valid Period

Valid for April 4 - June 30, 2013

Released April 4, 2013



KEY:

-  Drought to persist or intensify
-  Drought ongoing, some improvement
-  Drought likely to improve, impacts ease
-  Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events – such as individual storms – cannot be accurately forecast more than a few days in advance. Use caution for applications – such as crops – that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green Improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

Corn: USDA

3/8/13

HURT

09/10

10/11

11/12

12/13

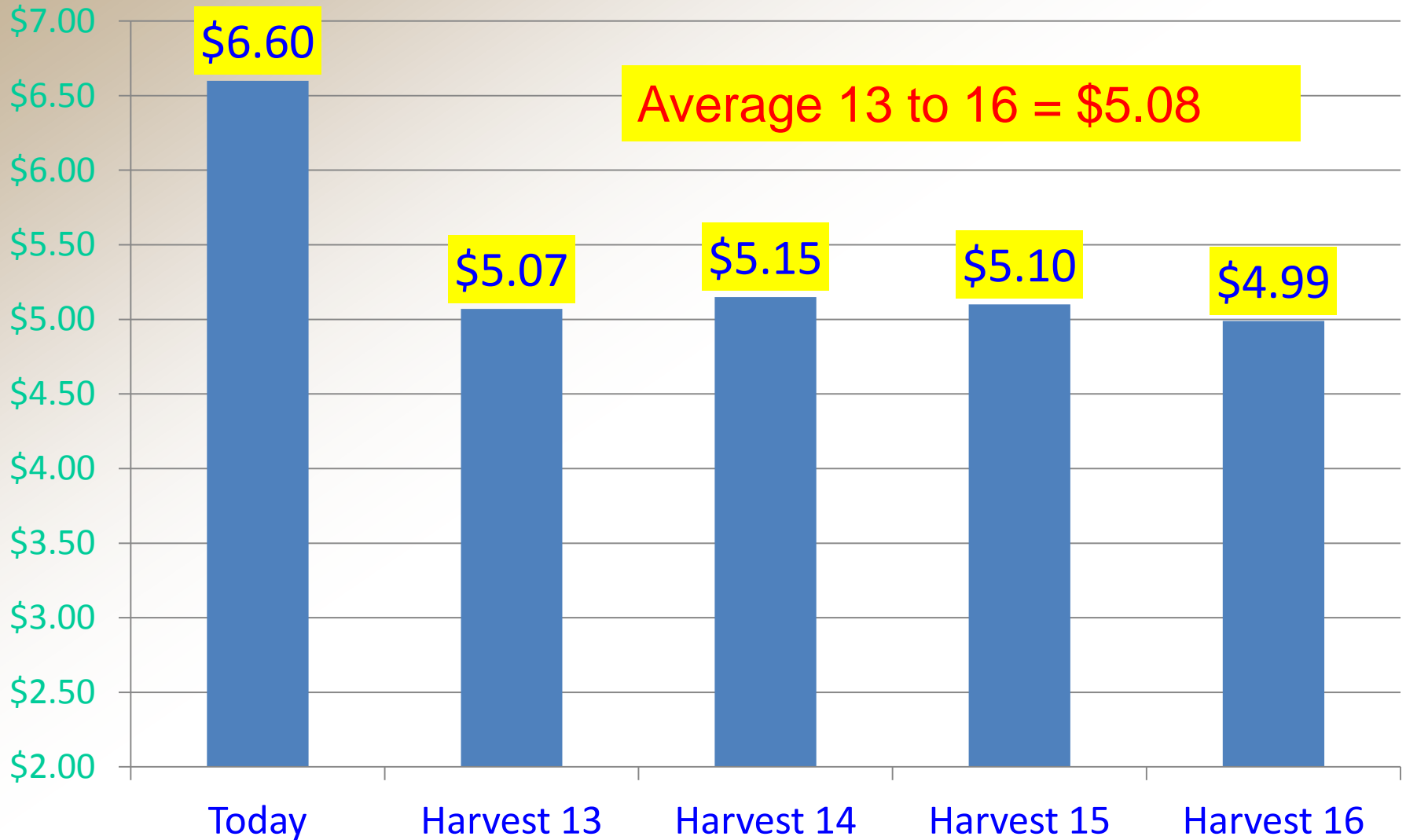
13/14

Million Bushels

Avg Price

Carryin	1,673	1,708	1,128	989	632
Production	13,110	12,447	12,358	10,780	14,536
Total Supply	14,791	14,182	13,514	11,894	15,193
Feed & Residual	5,166	4,792	4,547	4,550	4,900
FSI Non-Fuel	1,370	1,406	1,426	1,387	1,465
FSI Fuel (Ethanol)	4,560	5,021	5,011	4,500	4,900
Export	1,987	1,835	1,541	825	1,600
Total Use	13,083	13,054	12,525	11,262	12,865
Ending Stocks	1,708	1,128	989	632	2,328
US Farm Price	\$3.55	\$5.18	\$6.22	\$6.75- \$7.45 \$7.10	\$4.25 - \$5.75 \$5.00

Corn Cash Harvest Bids Based on Futures April 8, 2013



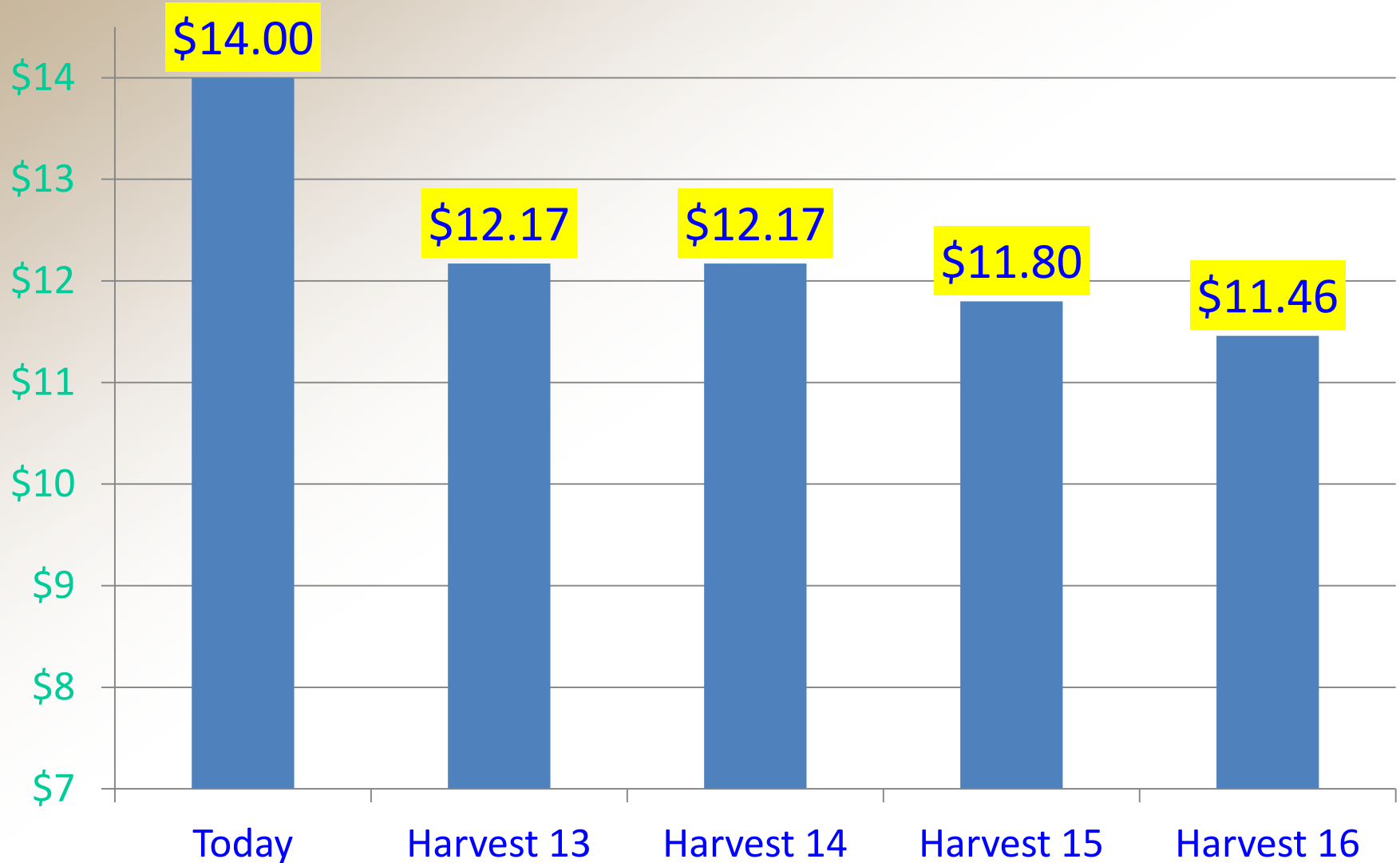
Soybeans:USDA

3/8/13

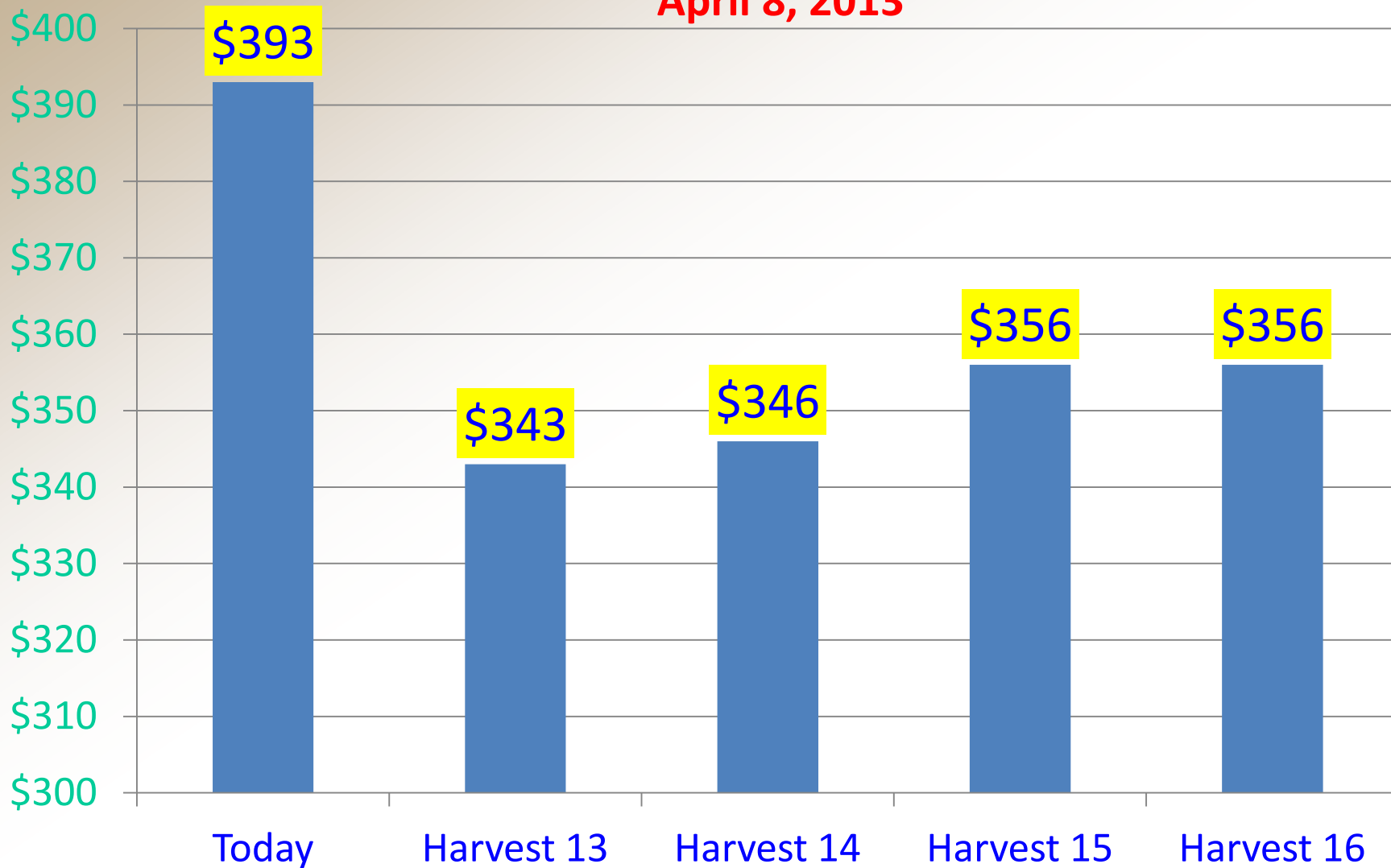
Hurt

	09/10	10/11	11/12	12/13	13/14
	<i>Million Bushels</i>				Avg Price
Carryin	138	151	215	169	125
Production	3,359	3,329	3,094	3,015	3,299
Total Supply	3,512	3,495	3,325	3,204	3,439
Seed & Residual	108	132	91	119	120
Crush	1,752	1,648	1,703	1,615	1,710
Exports	1,501	1,500	1,362	1,345	1,425
Total Use	3,361	3,280	3,156	3,079	3,230
Ending Stock	151	215	169	125	209
Farm Price	\$9.59	\$11.30	\$12.50	\$13.55- \$14.80	\$10.75 - \$12.75
				\$14.30	\$11.75

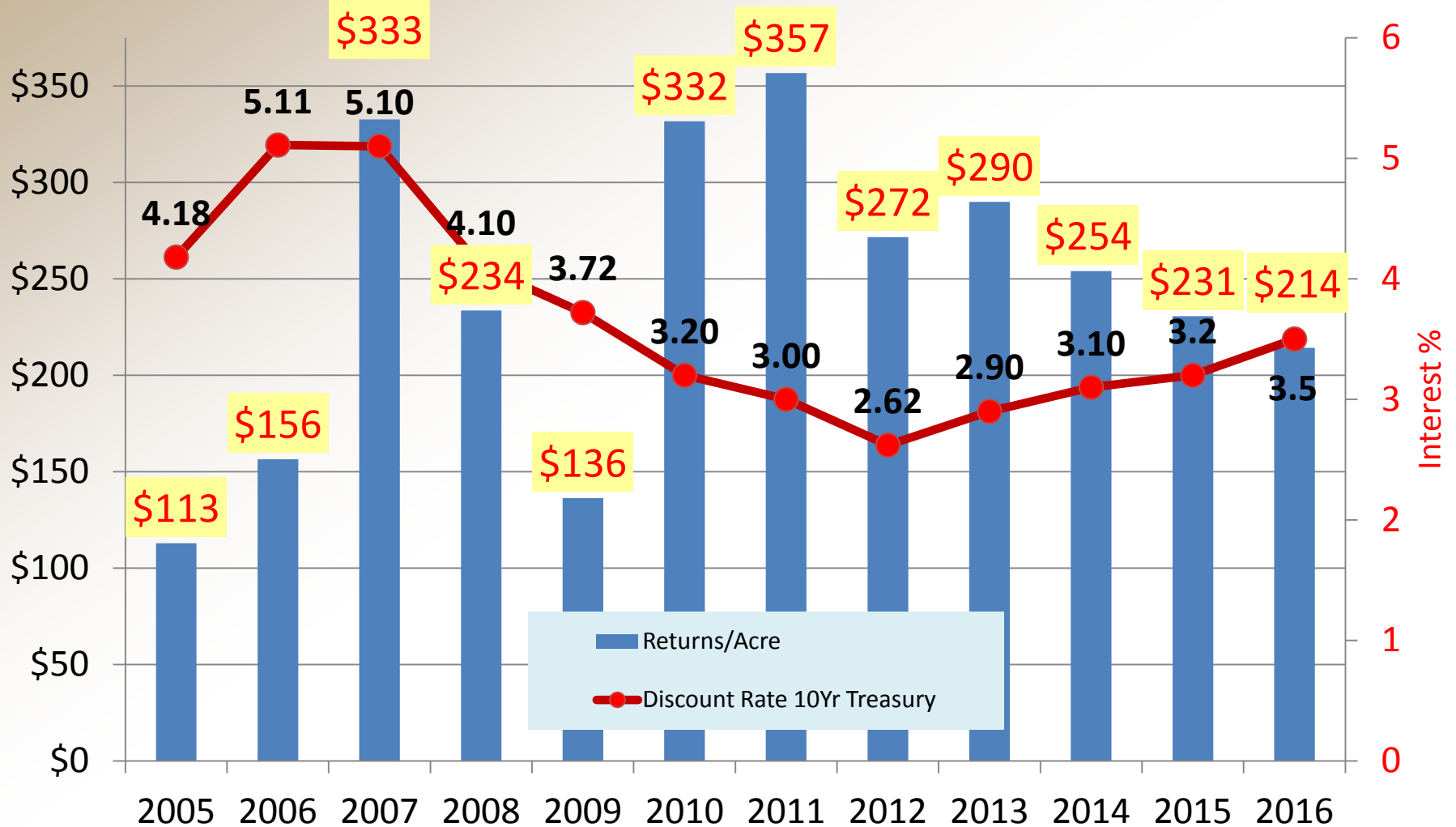
Bean Cash Harvest Prices Based on Futures April 8, 2013



Meal Futures Harvest Prices Based on Futures
April 8, 2013



Estimated Ownership Returns/Acre to Average Quality Indiana Land, March 25, 2013



Tea Leaves 2013-2016

Moderation-with a Soft Landing??

Next 4 Years

- Slowing world demand growth
- Increased world grain supply
- Moderating crop prices
- Some upslope to interest rates
- Return of profitability to animal production
- Rate of Land Appreciation to moderate
- Moderating farm income
- Weather???????
- Overall a SOFT LANDING for Ag Economy

