

# The Outlook for Agriculture



Presented to:

The Fertilizer Institute

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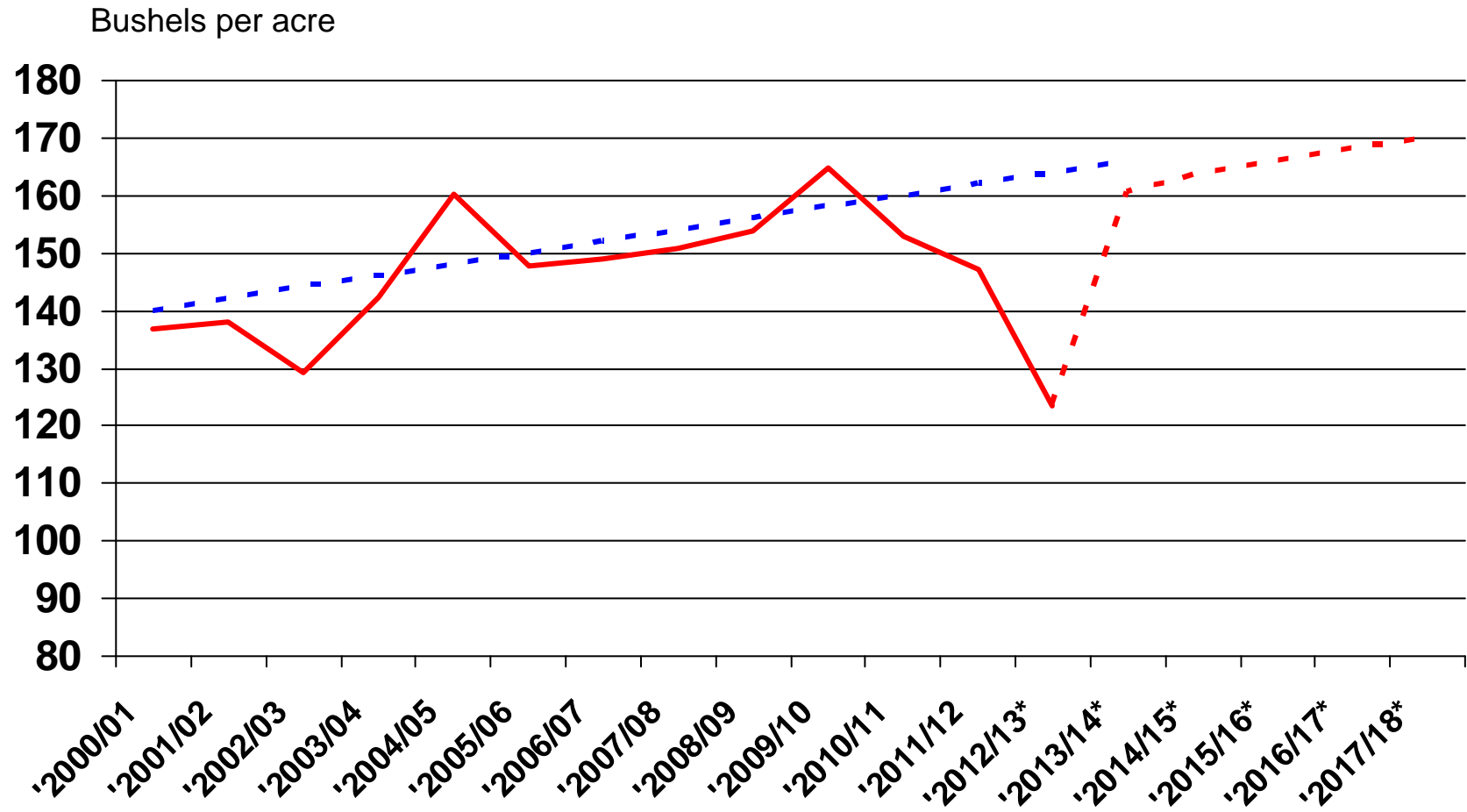
# Overview

- The character of the corn sector is changing
  - We need less acres – even with stronger demand
- Exports will be critical for the outlook
- Competition has increased
- The future of farm policy is unclear

# Corn Sector Outlook

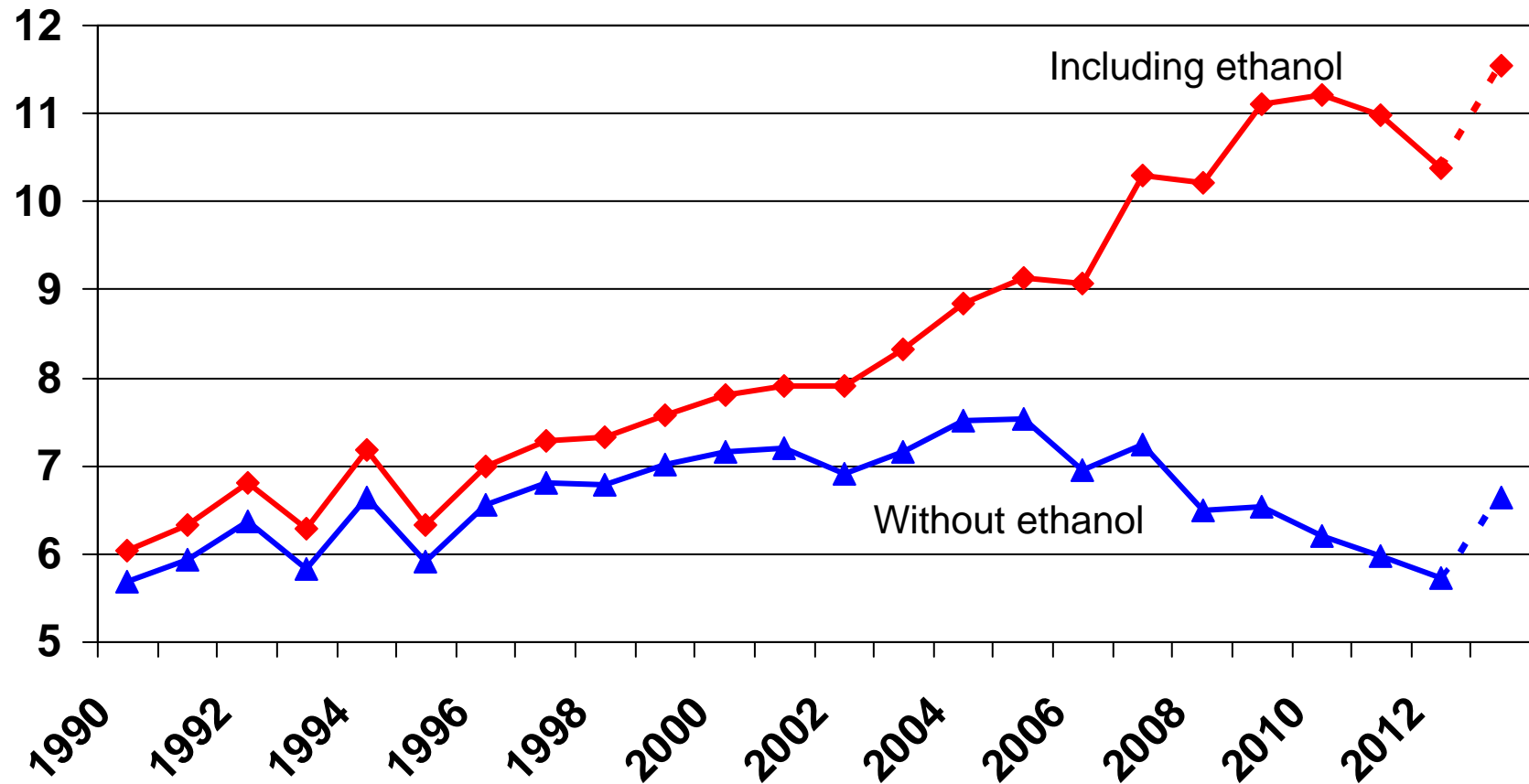
- The 2013 Crop is record large
  - Even with the wet spring – dry summer
  - And below trend yields
- Demand will need to rebound
  - Especially exports
- Stocks will rise significantly
- Corn prices will be lower in 2013/14

# U.S. Corn Yields

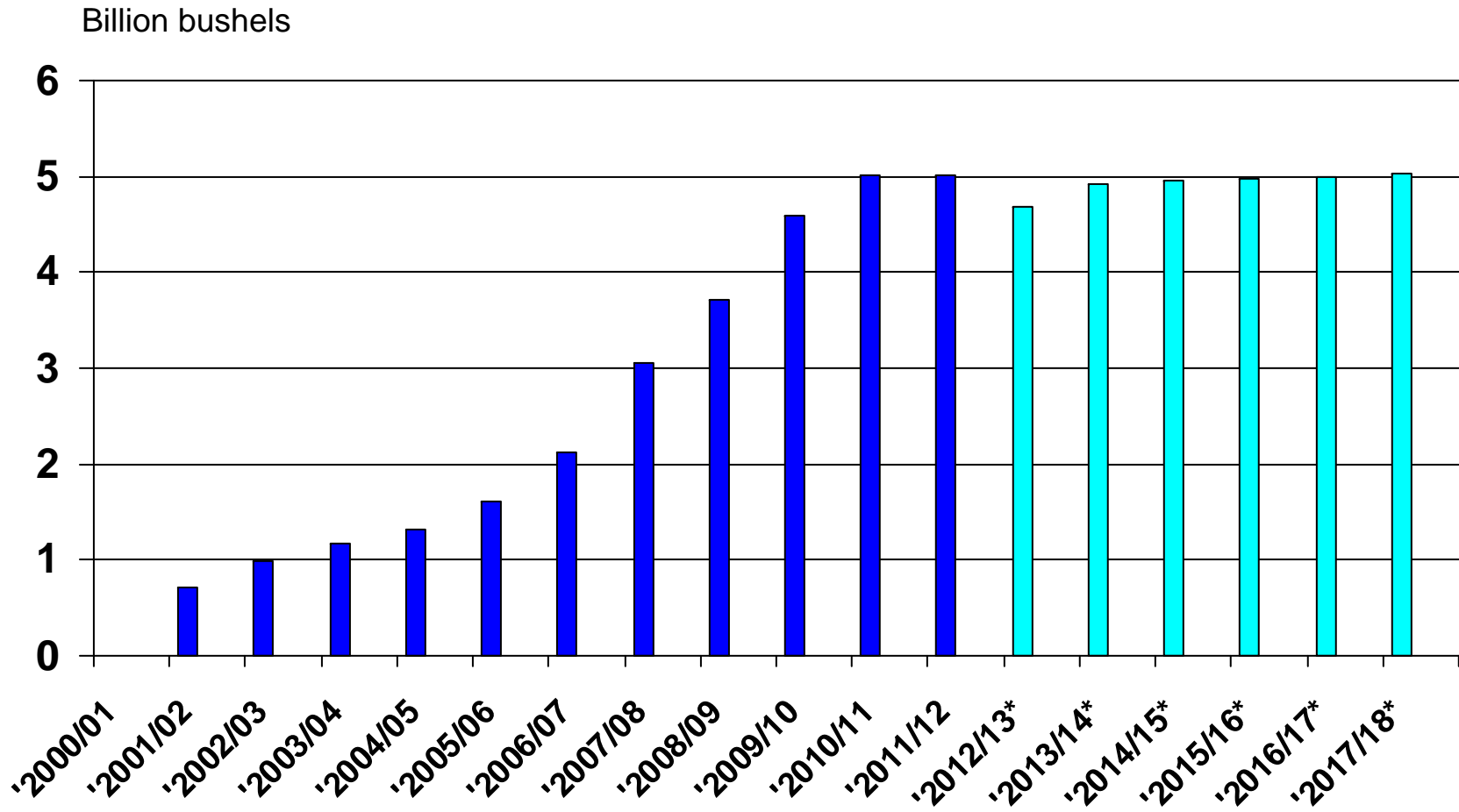


# Domestic Corn Use

Billion Bushels



# Corn Demand for Ethanol

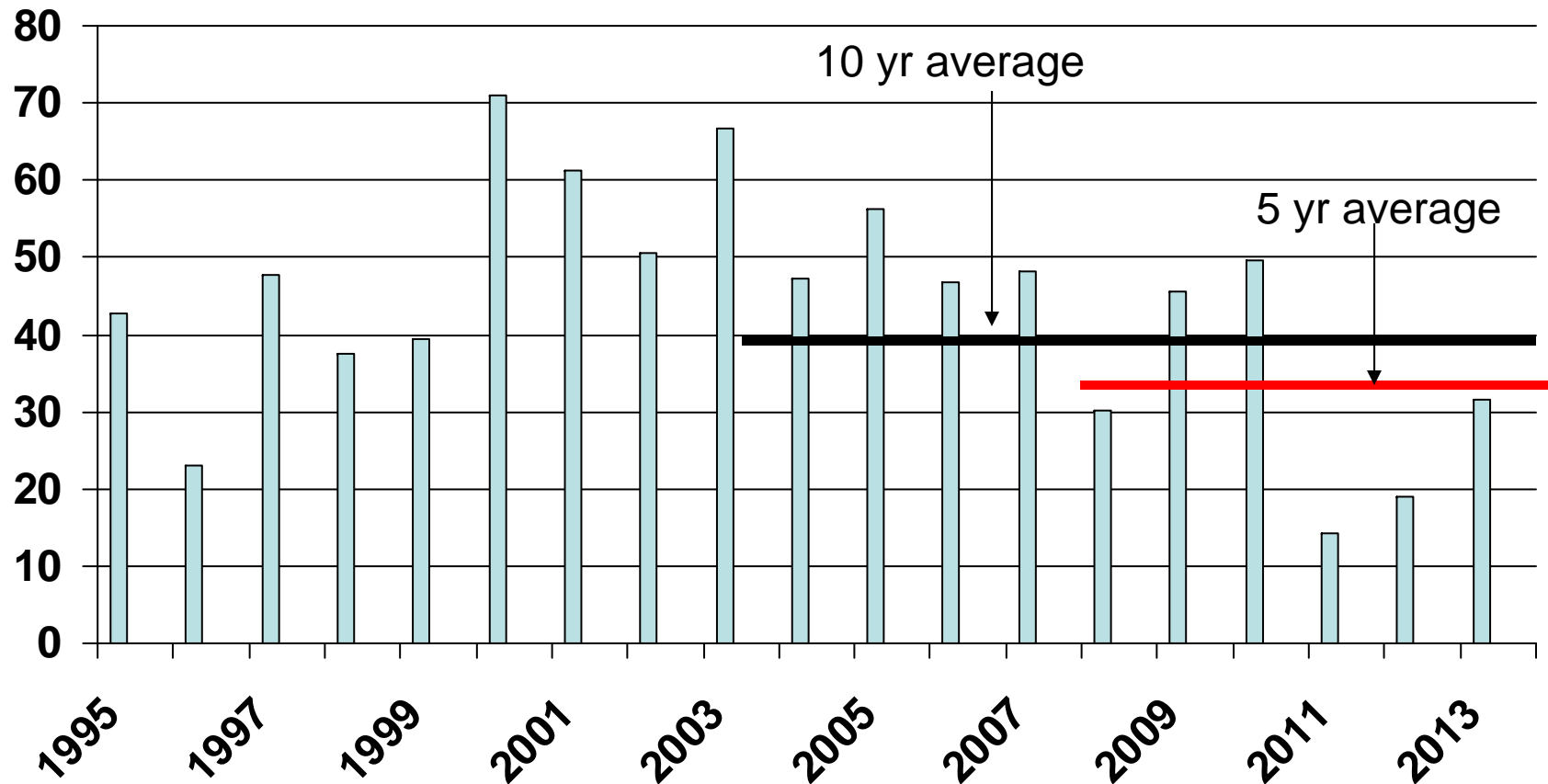


# Ethanol Demand Factors

- Mandate is for 13.8 billion gallons for 2013  
14.4 billion in 2014
  - But EPA is has reduced the mandate for 2014
  - Corn –based probably around 13.2 billion gallons
  - Close to what will be produced this year
- Gasoline consumption in 2012=134 billion gallons
  - **We are close to the “blend wall”**
- Expect a Court Challenge

# Foreign Corn Deficit (production-consumption) in million tonnes

**We need to export about 45 mmt (about 1.75 billion bushels)**

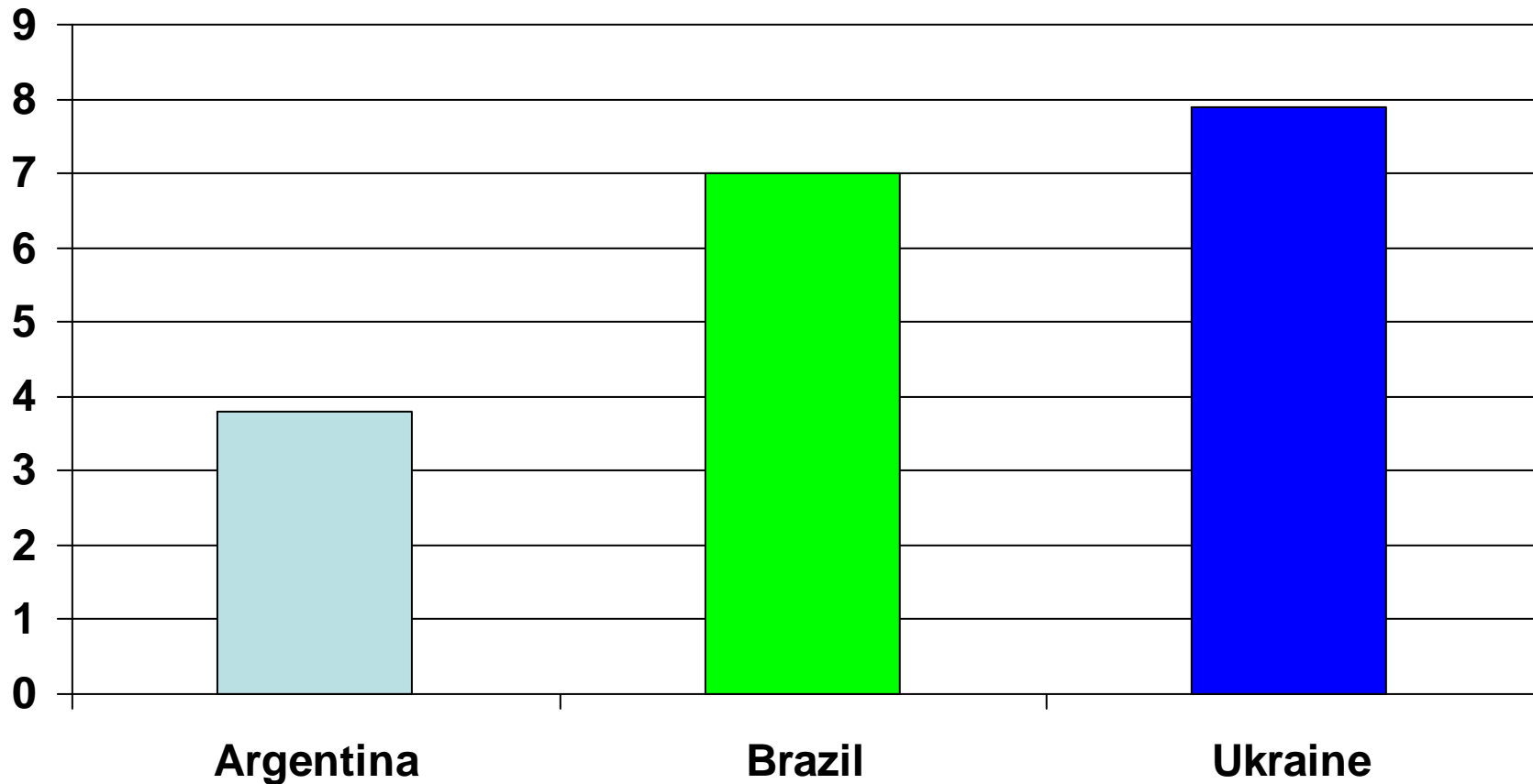


The 10 yr avg is 1.53 billion bushels

the 5-yr 1.26 billion

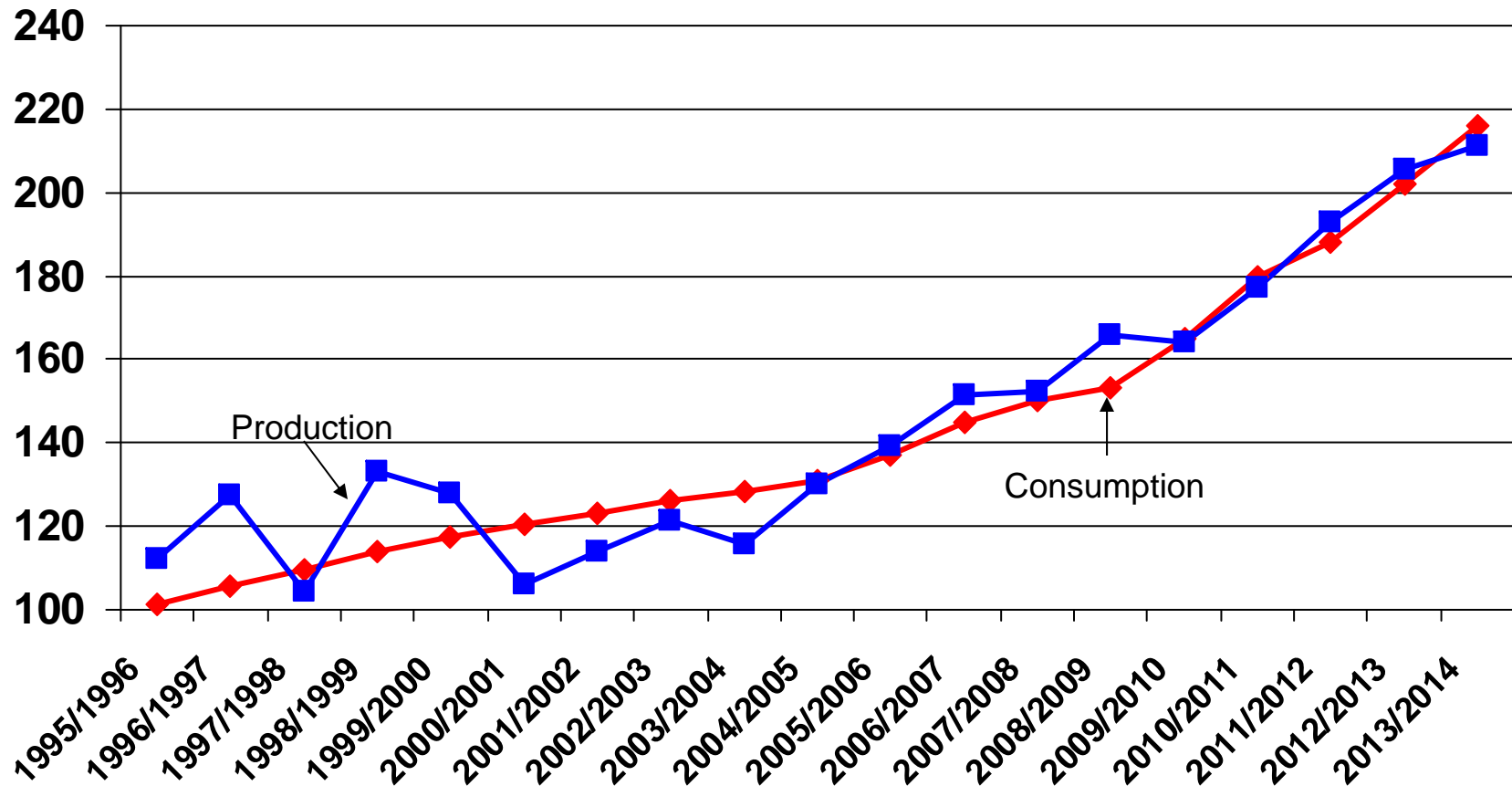


# Change in Corn Area Since 2002 among three rising U.S. competitors (million acres)



# China's Corn Production & Consumption

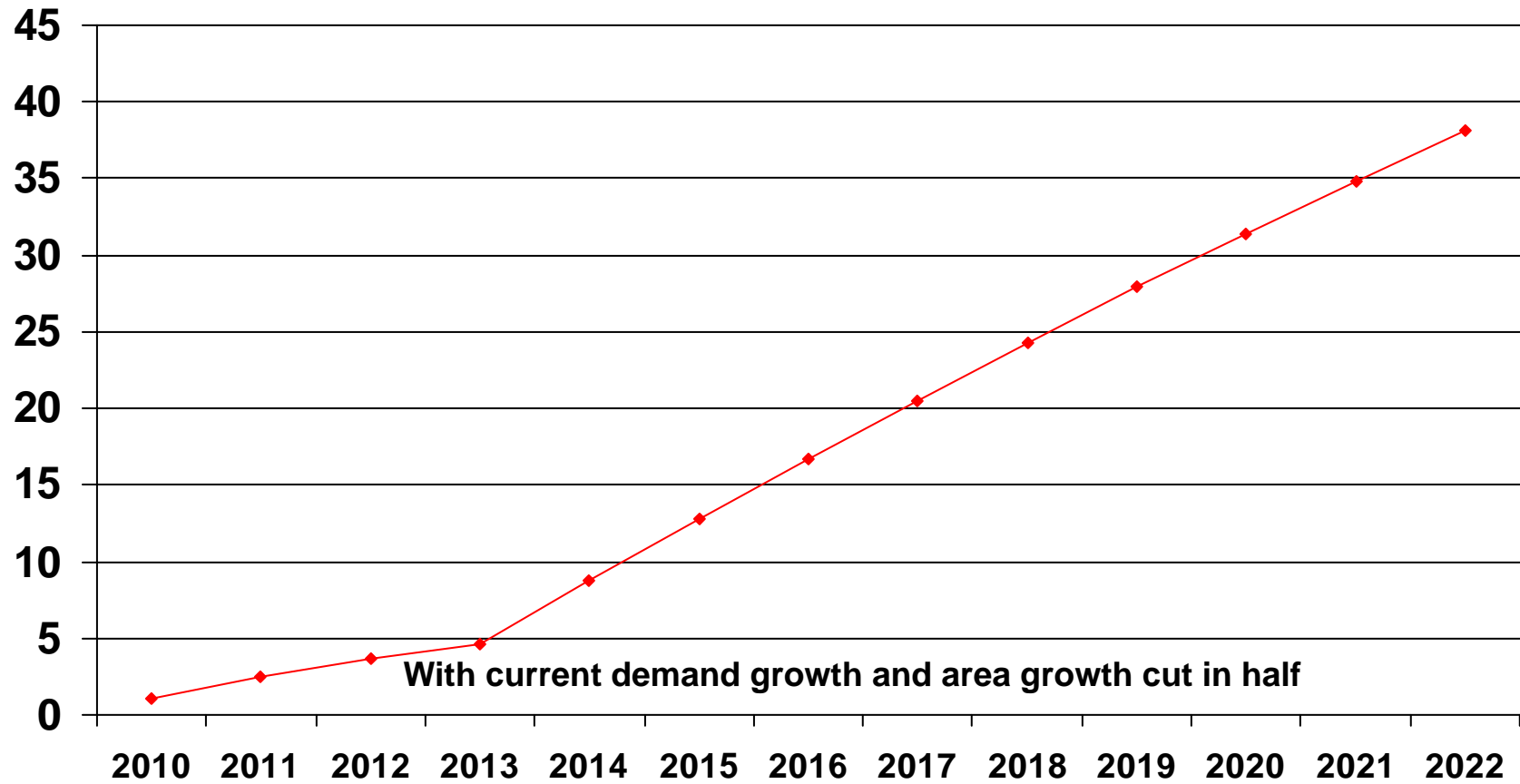
million tonnes



But China's Production Has Generally Kept Pace With Consumption

# China's Corn Deficit

million tonnes



# Let's Do The Math

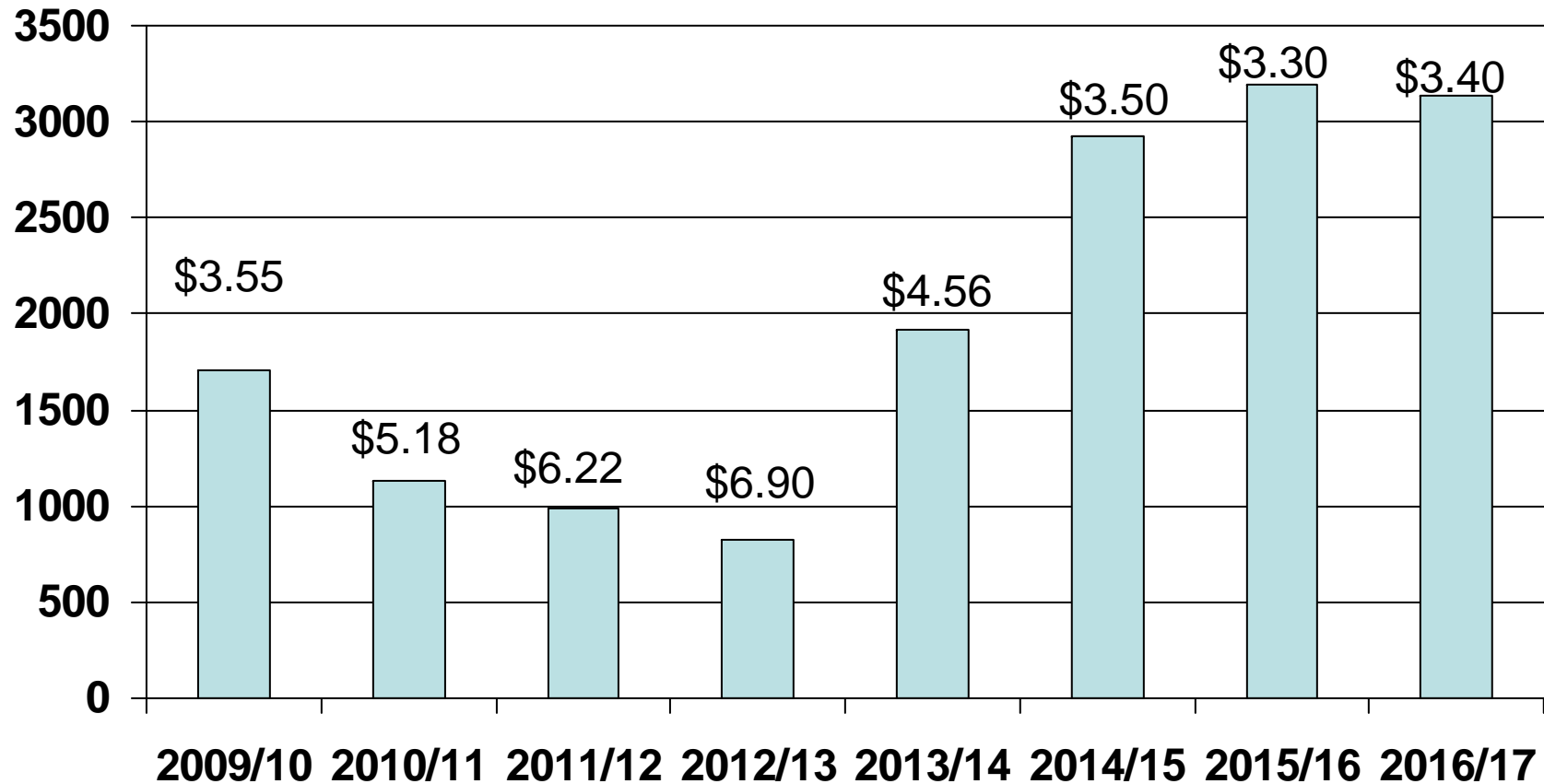
- Corn feed use ~ 5.2 billion bushels (4.33)
- Ethanol use ~ 4.9 billion bushels (4.65)
- Other FSI use ~ 1.5 billion bushels (1.40)
- Exports ~ 1.7 billion bushels (0.73)
  
- Total 13.3 billion bushels (11.11) +20%
  
- We need about 88 million acres planted
- With 92 acres planted – exports of 2.3 bbu are needed

Yield ~ 164 bu/acre



# U.S. Ending Corn Stocks and Prices

million bushels & \$ per bushel



# Crop Budgets for 2014

dollars per acre

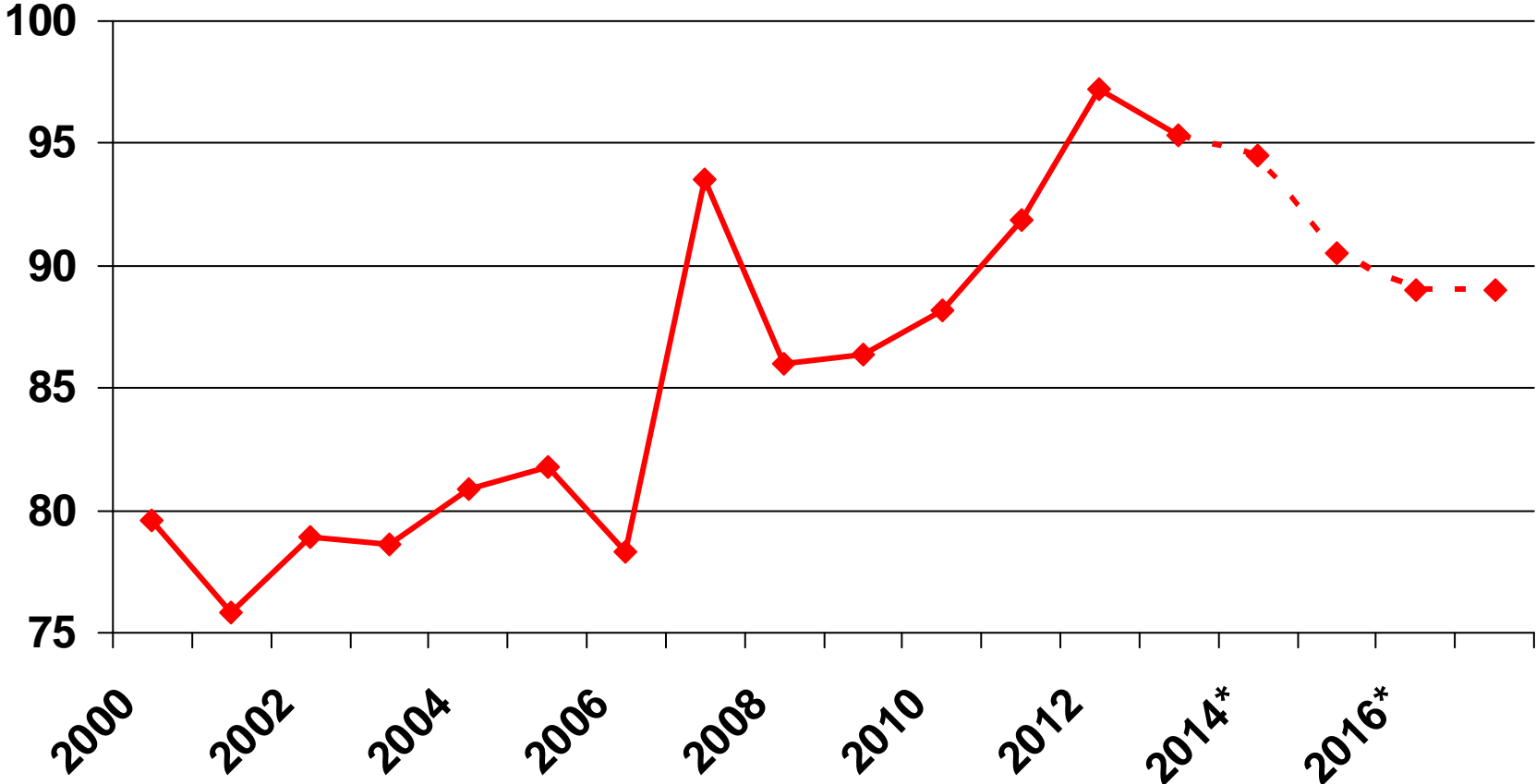
	Corn	Corn-on-corn	Soybeans
Revenue	\$730	\$679	\$510
Operating Costs	\$328	\$344	\$149
Net Returns	\$403	\$335	\$360

Estimates based on \$4.50 corn price and soybean prices of \$11.77 per bushel  
Corn yield is 162 bushels/acre – corn-on-corn yield is 151 bushels/acre

**In the Corn Belt net returns for soybeans are higher than those for corn  
\$437 versus \$418 and \$348**

# Corn Acreage

million acres



# Implications

- The U.S. market for fertilizer, corn seed and pesticides is going to shrink
  - And probably pretty significantly
- Corn production profits will get slim
  - Farmers will be more price conscious
  - They may cut back on some inputs

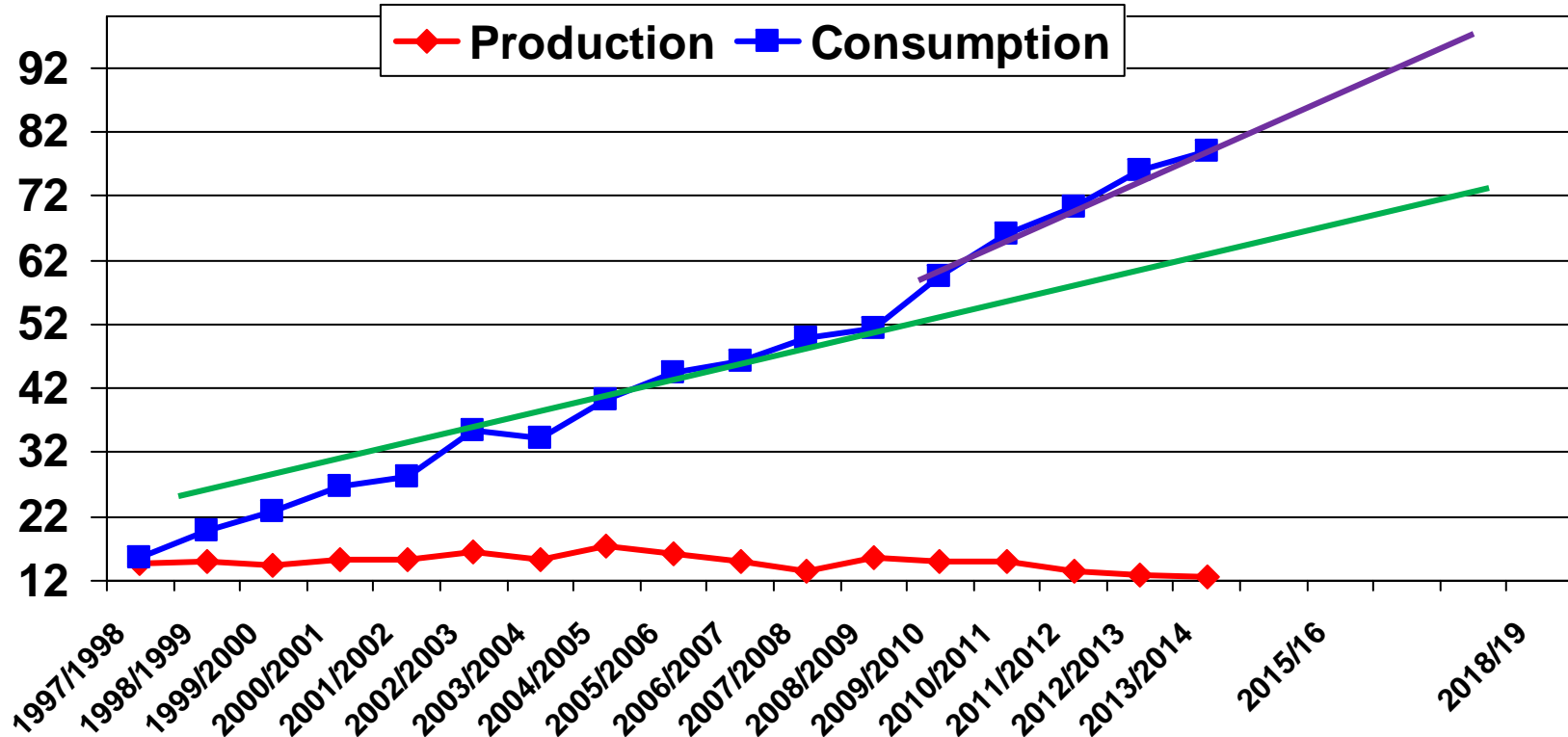


# Soybean Sector Outlook

- Acreage affected by the wet spring
- Yields are forecast below trend
- Demand is strong
- Lower prices and higher costs may slow expansion in S. America
- Soybean-corn price ratio likely to improve
- High acreage again next year

# China's Soybean Balance

million tonnes

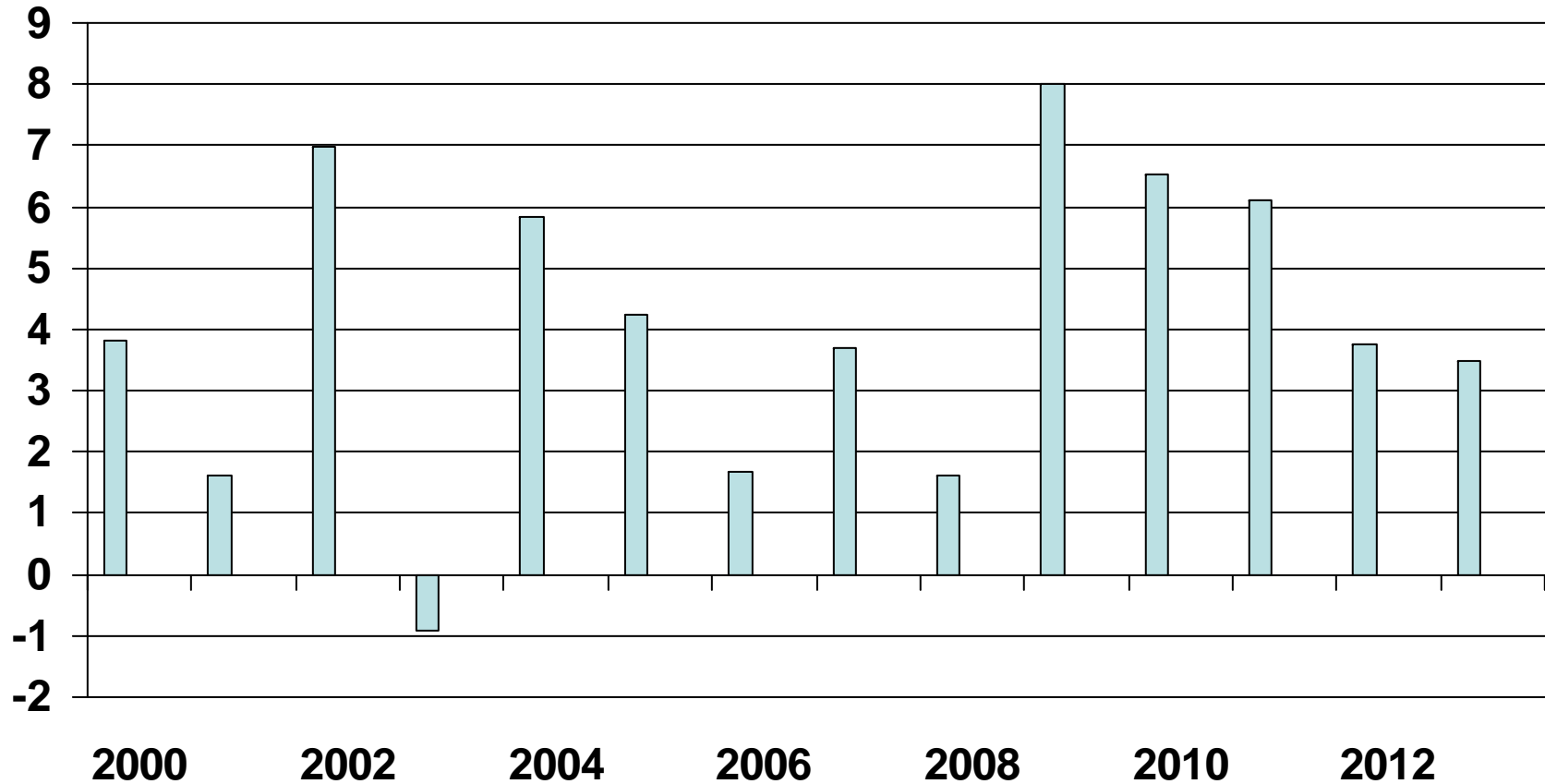


Deficit in 2018/19 is about 86 mmt compared to 63 million this year

We need to add nearly 4 million acres per year – just for China

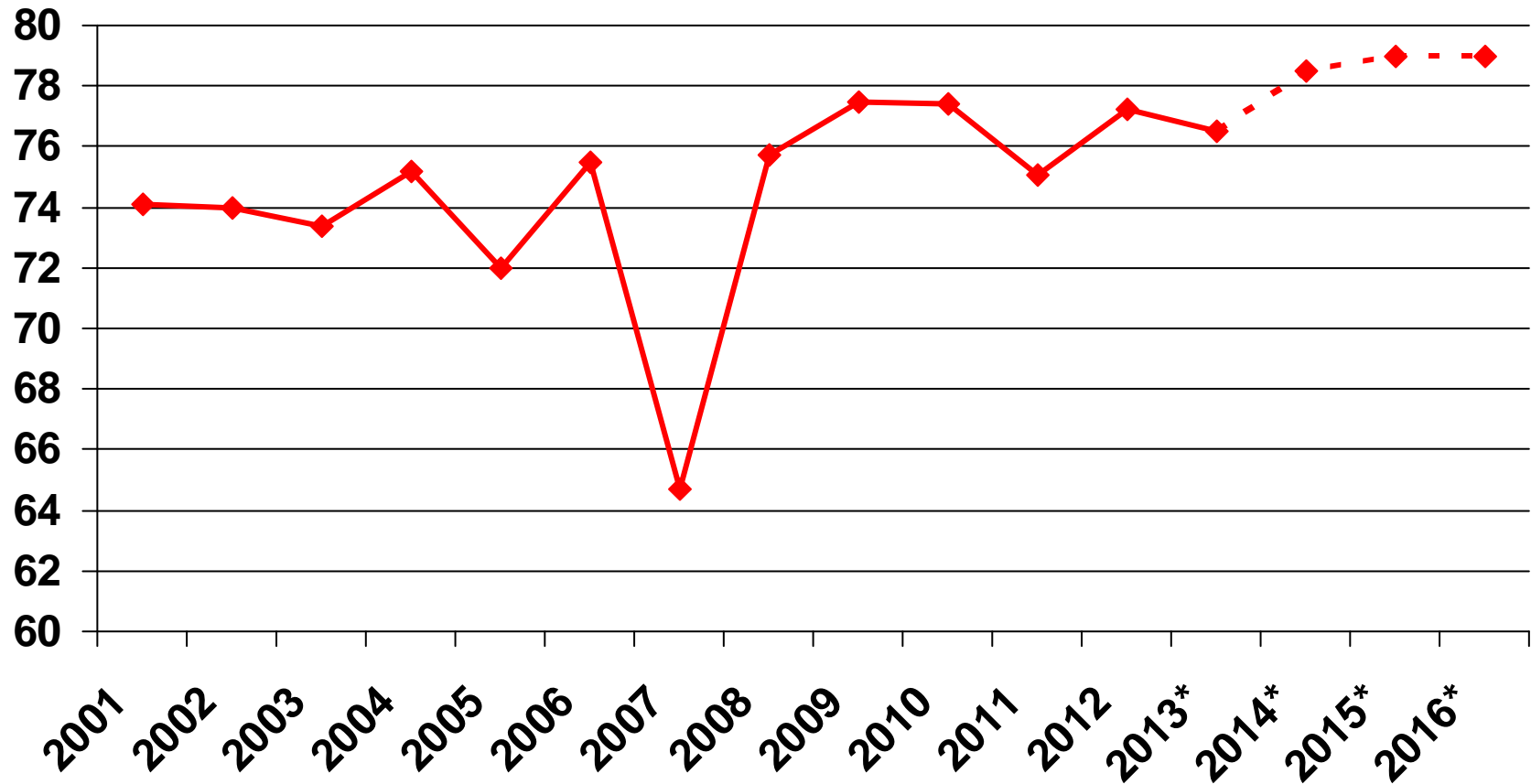
# China's Soybean Demand Growth

million tonnes



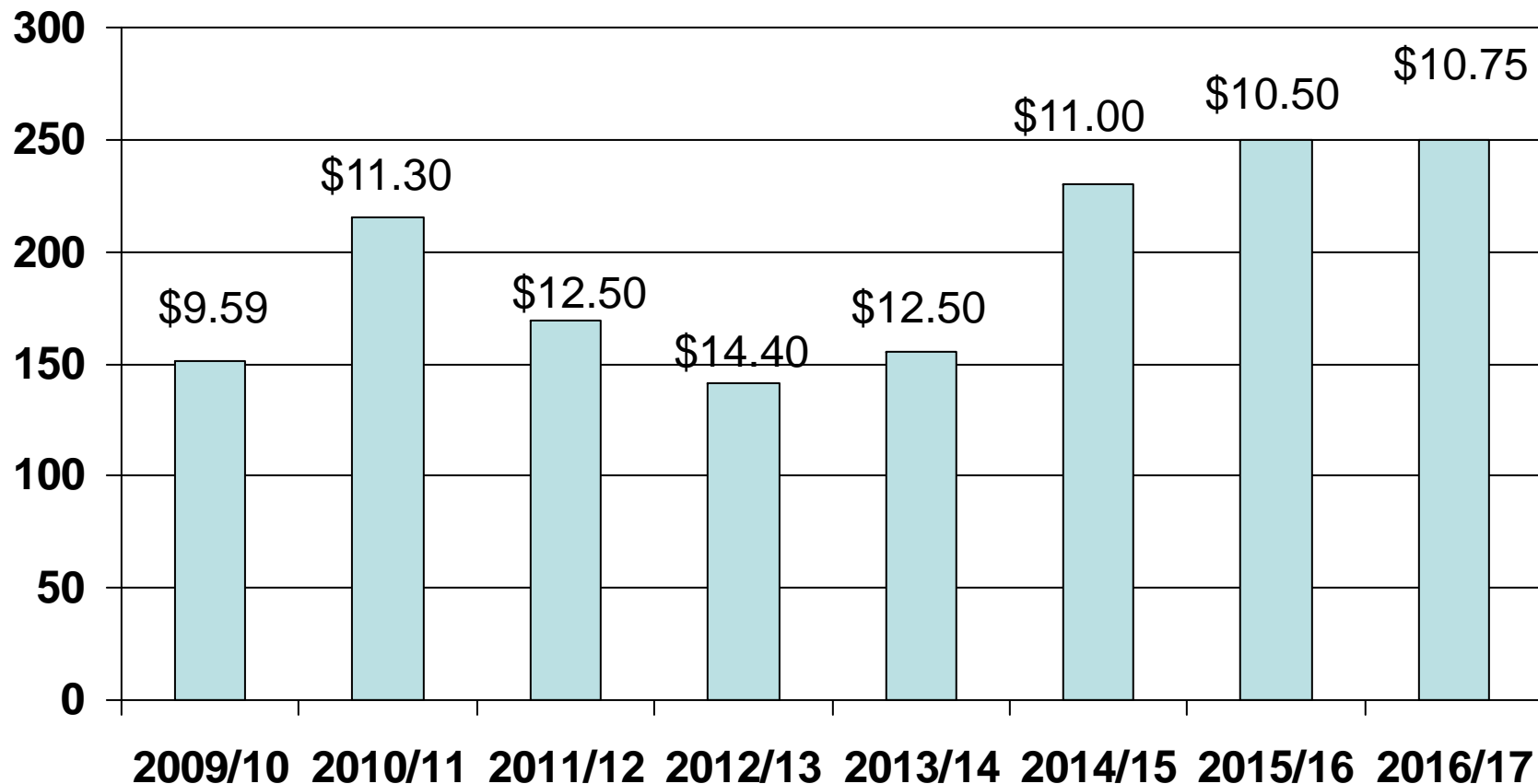
# U.S. Soybean Acreage

million acres



# U.S. Ending Soybean Stocks and Prices

million bushels & \$ per bushel



# Implications

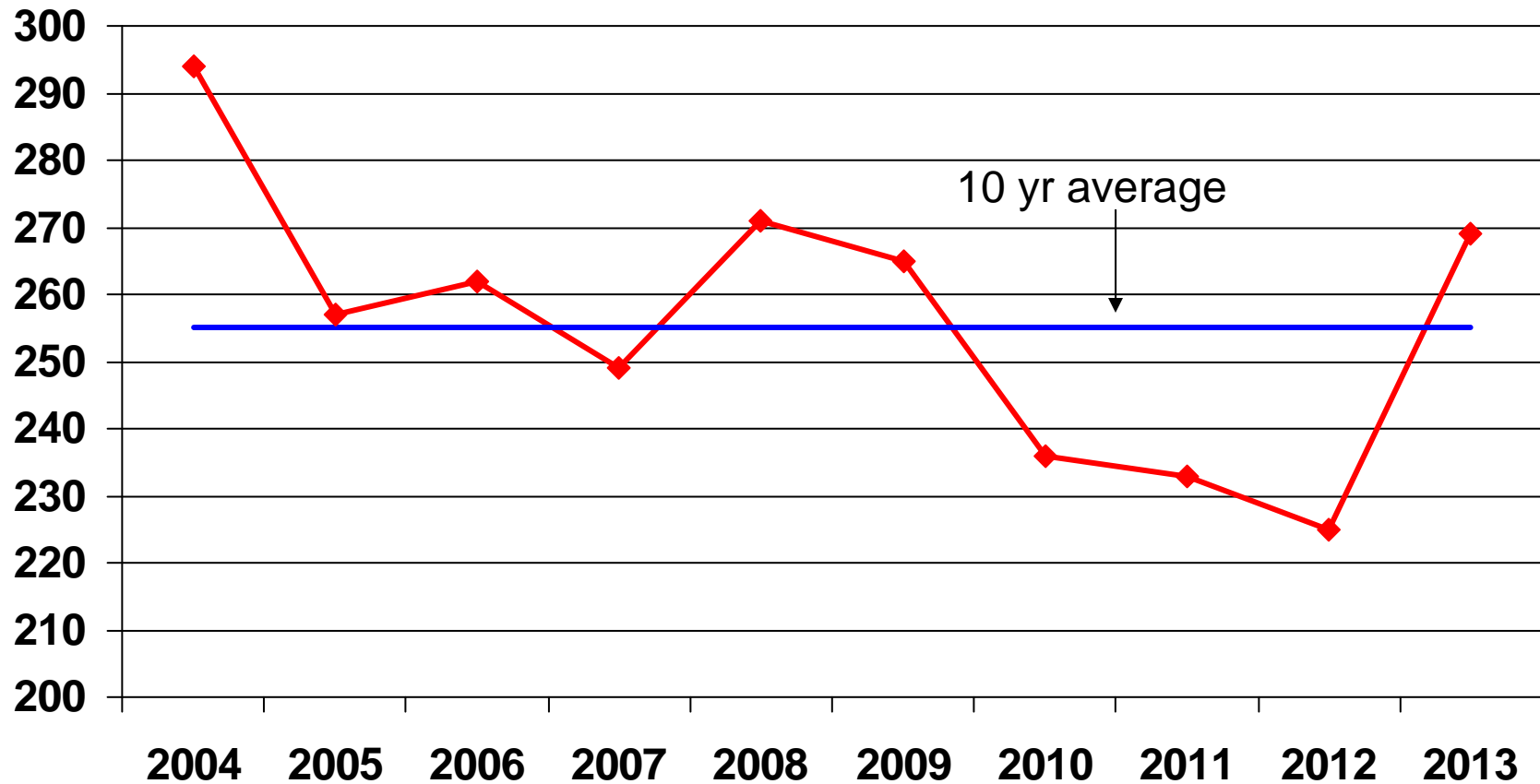
- China holds the key
  - If demand growth continues –
    - The U.S. market will stay tight
    - Acreage will stay high
- But there are some that think China's economic growth will slow
- Expansion in S. America may slow down

# Wheat Sector Outlook

- Production was down this year
  - Because of the drought in the Plains states
- Big crops are expected elsewhere
  - Foreign production is forecast up 54 mmt
  - Mostly in the FSU
- But China is buying wheat
  - (126 million bushels versus 15 million last year)
- U.S. stocks are expected to decline
- But prices will be lower

# Winter Wheat Condition Ratings

index (excellent=400)





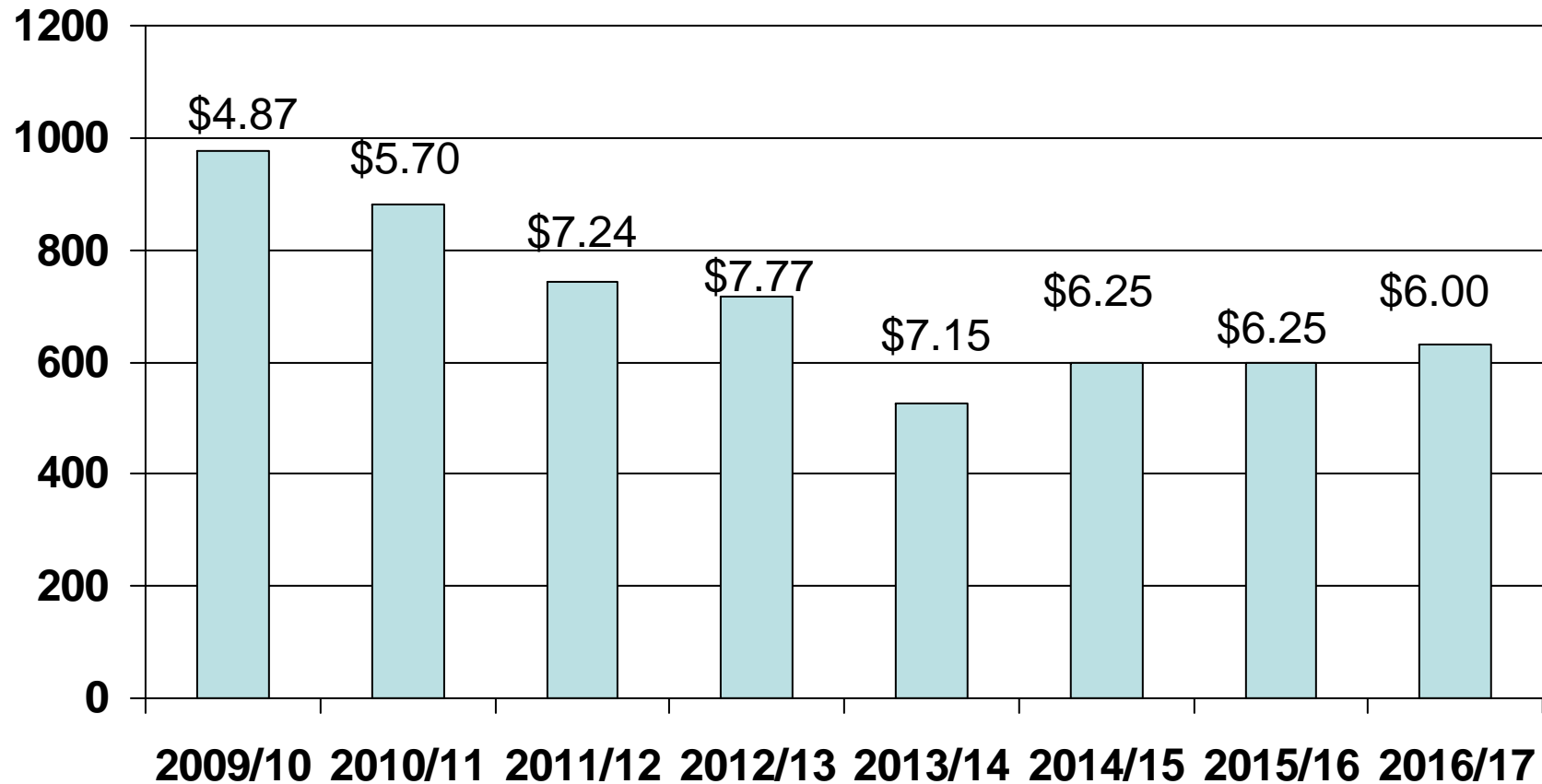
# Wheat Sector Outlook

billion bushels

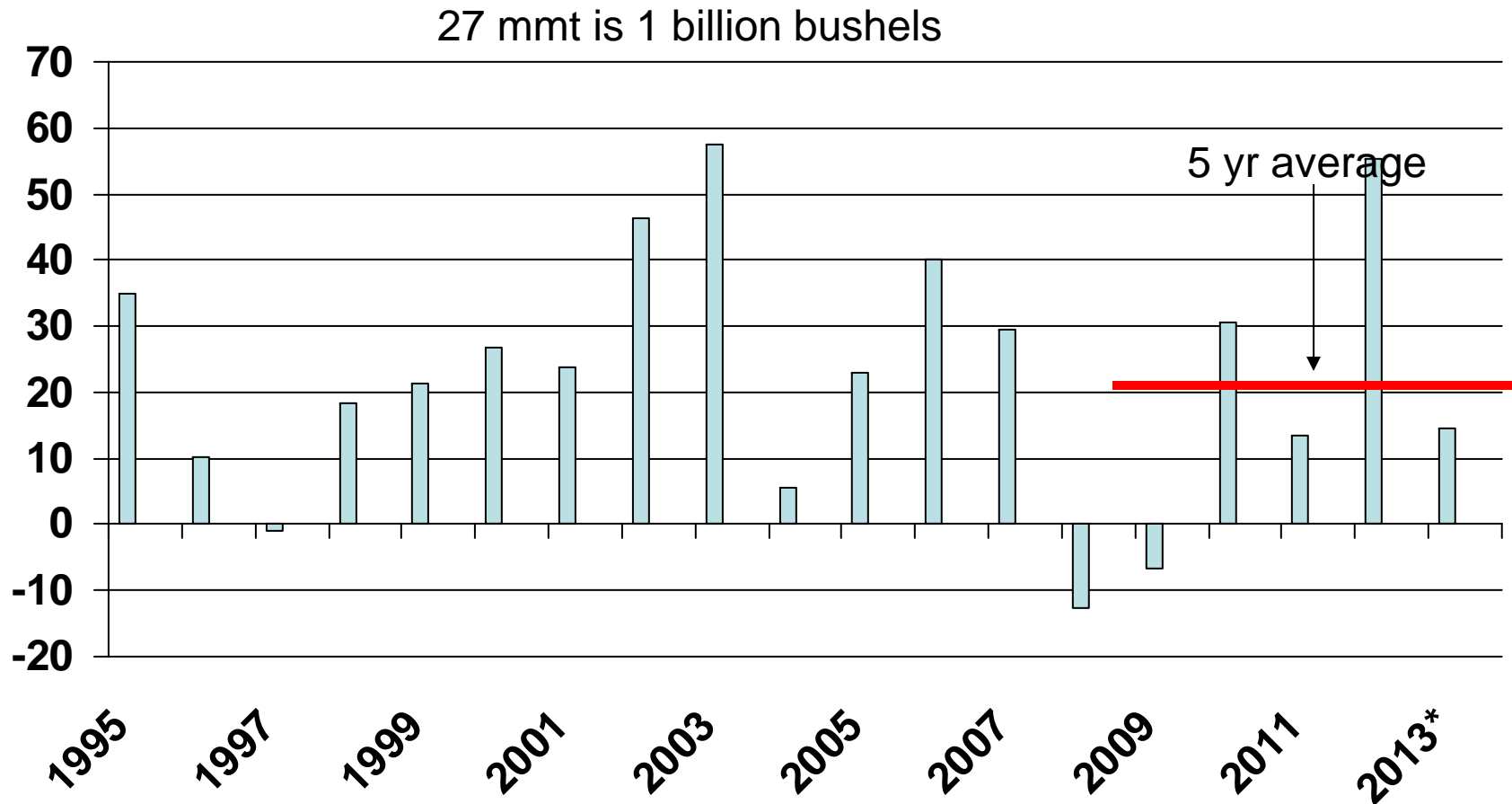
	2013/14	2014/15	2015/16
Planted Acres (mil)	56.2	57.0	56.0
Production	2.13	2.22	2.19
Domestic Use	1.36	1.21	1.22
Exports	1.11	1.05	1.08
Total Use	2.47	2.26	2.29
Ending Stocks	.525	.600	.600
Price (\$/bushel)	\$7.15	\$6.25	\$6.25

# U.S. Ending Wheat Stocks and Prices

million bushels & \$ per bushel



# Foreign Wheat Deficit (production-consumption) million tonnes

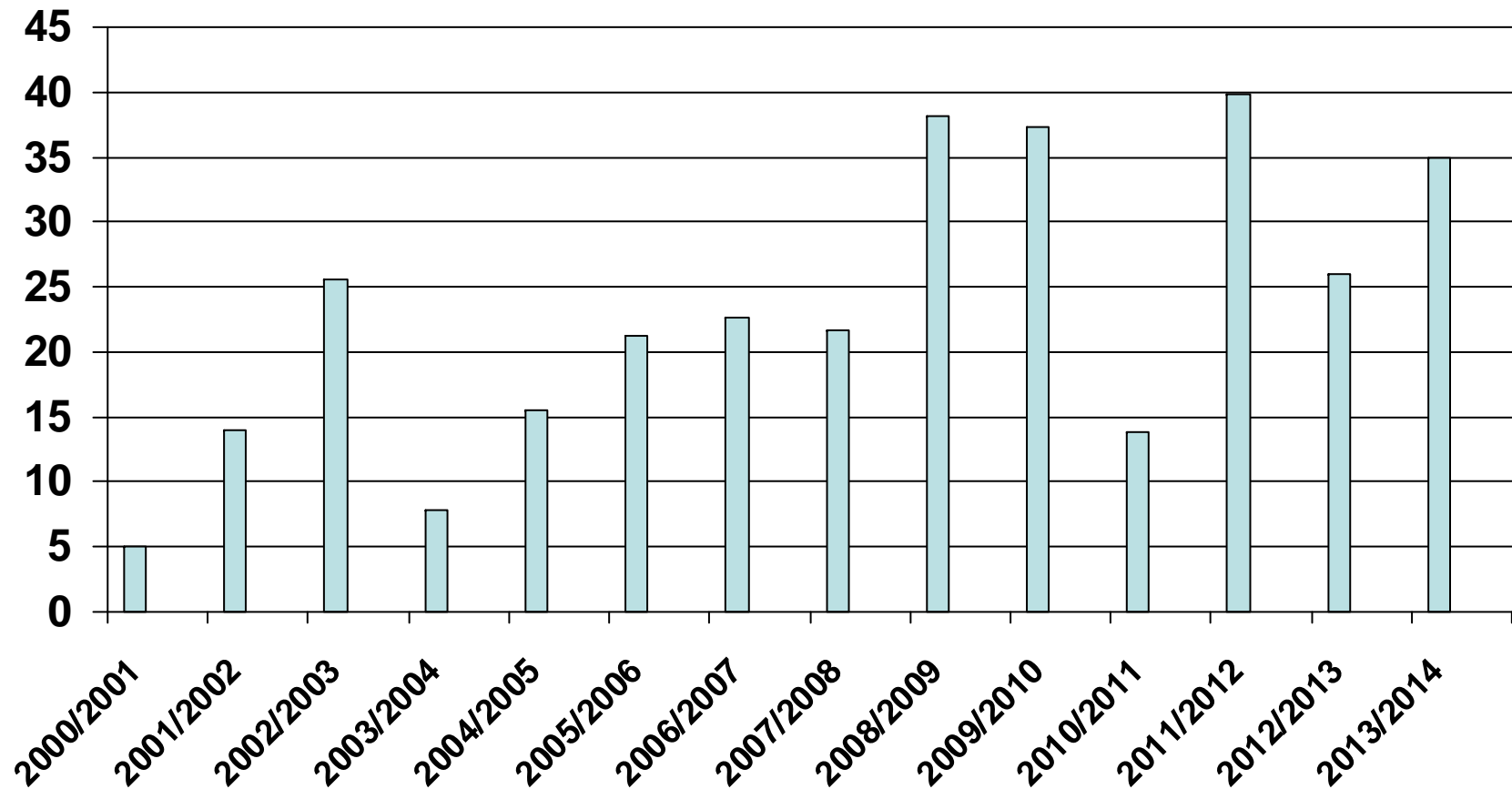


the 5-yr average is 787 million bushels



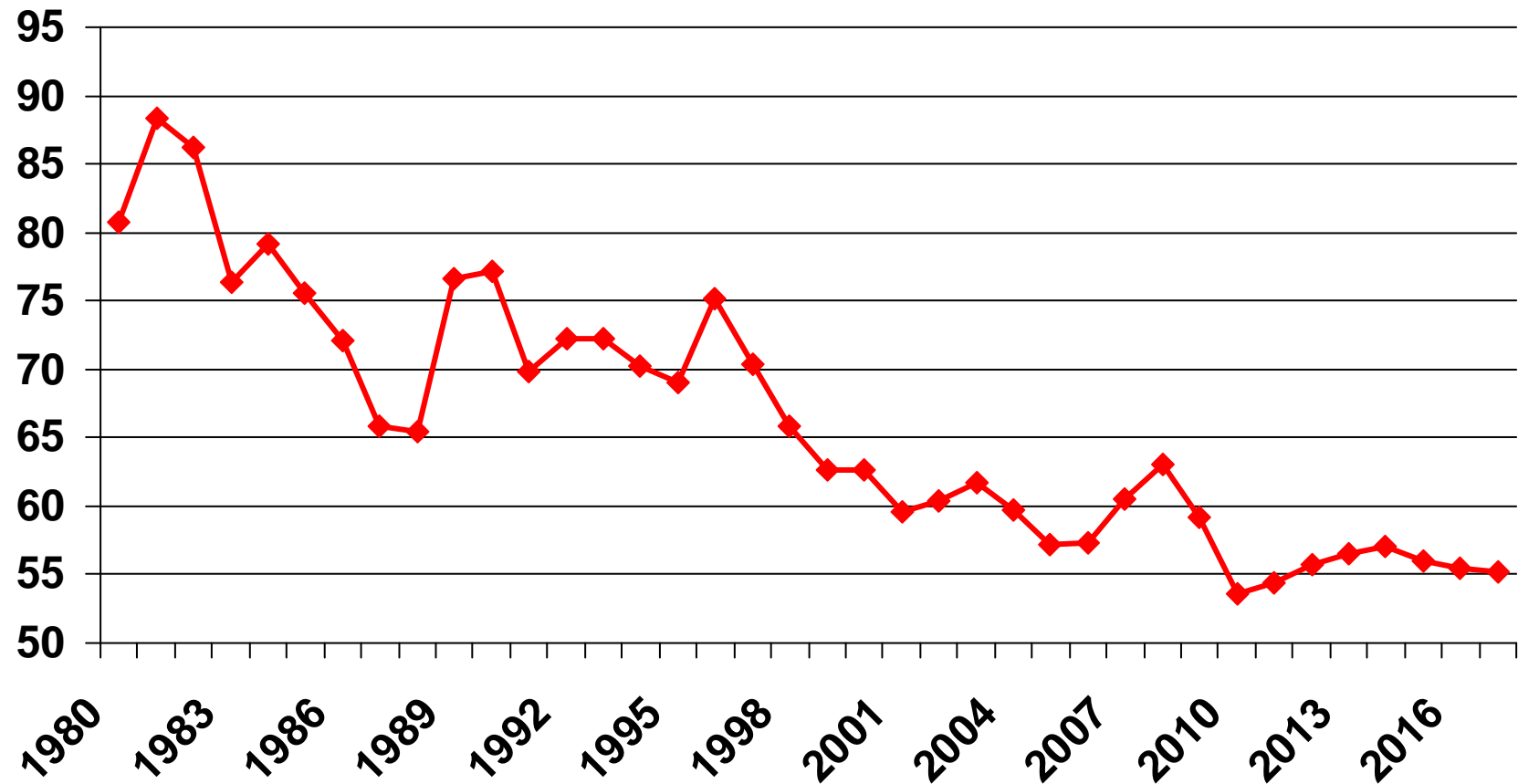
# FSU Wheat Exports

million tonnes



# U.S. Wheat Acreage

million acres



# Implications

- Exports are key & we are losing market share to the FSU
- Wheat acreage has declined for decades – and more declines are possible

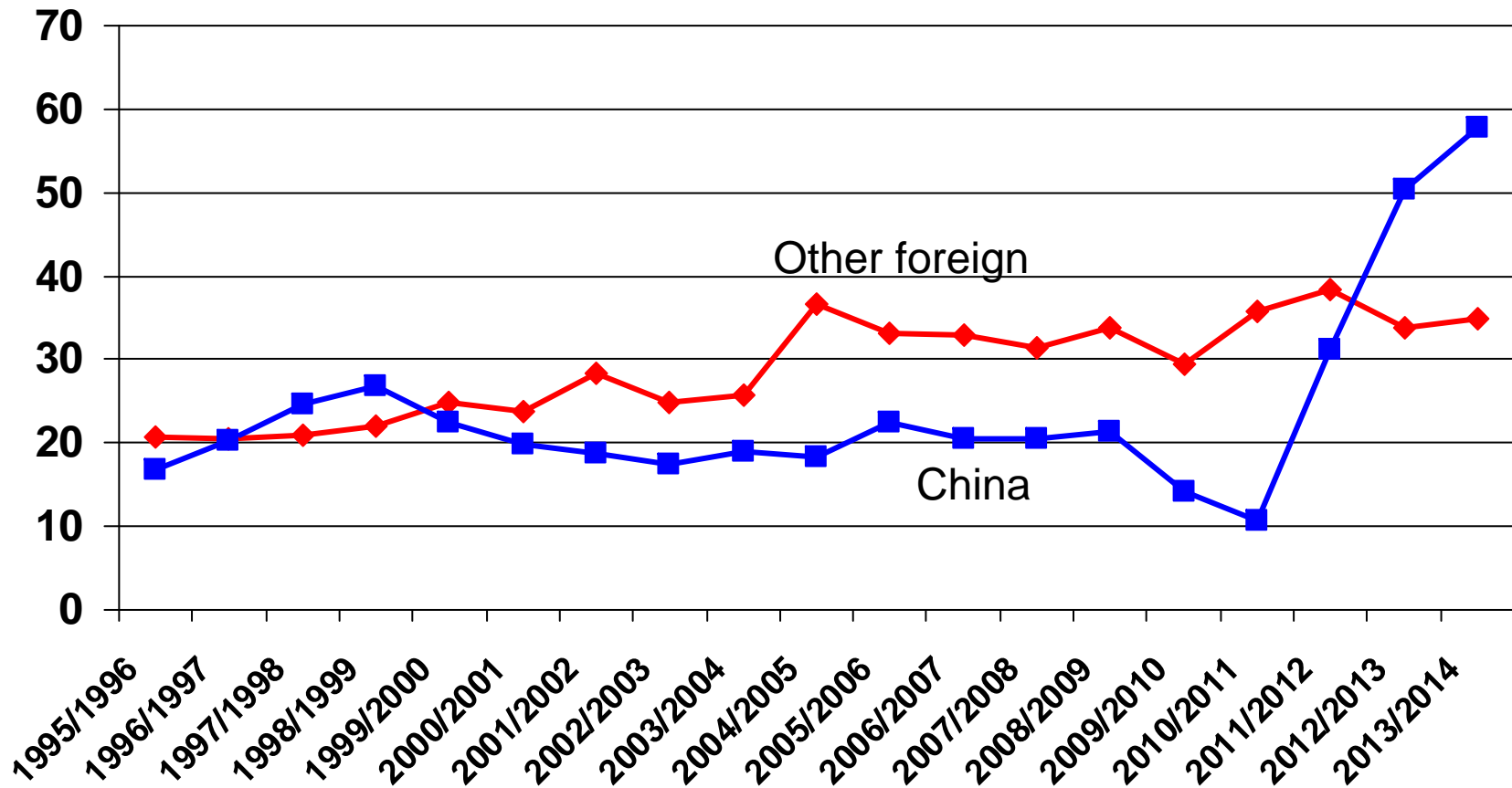
# Cotton Sector Outlook

- Production is down 4 million bales from 2012
  - But demand is down 2.5 million
- China is the big wildcard for cotton
  - If China doesn't dump cotton – stocks should stay tight supporting prices

# Cotton Stocks

million bales

Stocks-to-use ratio = 160% in China 50% in other foreign

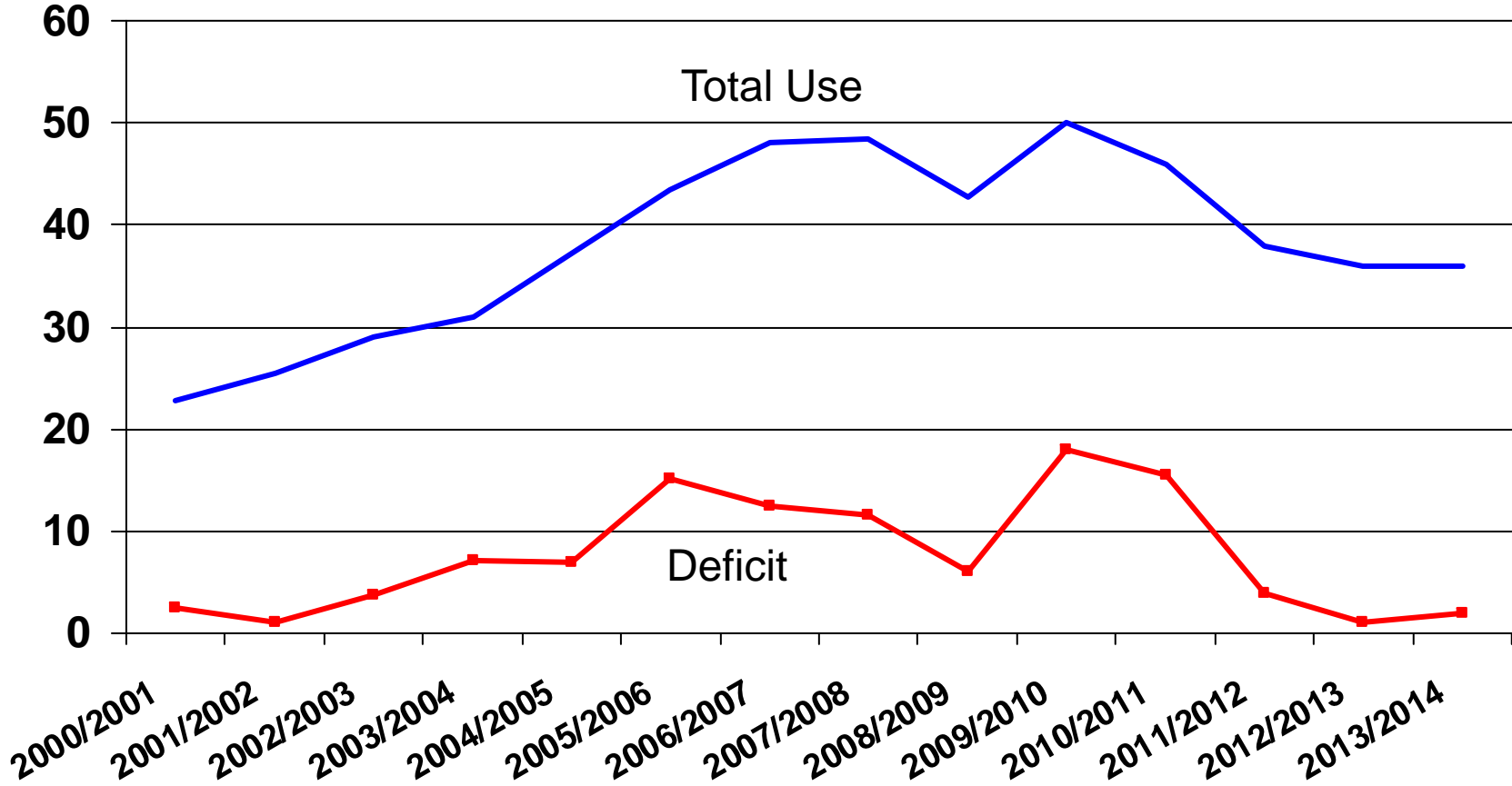


Imports of 25 mil bales in 2011 – 20 mil in 2012 and 11 mil 2013



# China's Cotton Demand

million bales



# Cotton Sector Outlook

## million bales

	2013/14	2014/15	2015/16
Planted Acres (mil)	10.3	10.3	10.5
Production	13.1	13.9	14.4
Domestic Use	3.6	3.7	3.8
Exports	10.4	10.6	10.7
Total Use	14.0	14.3	14.5
Ending Stocks	3.0	2.6	2.5
Price (cents/lb)	77	85	90

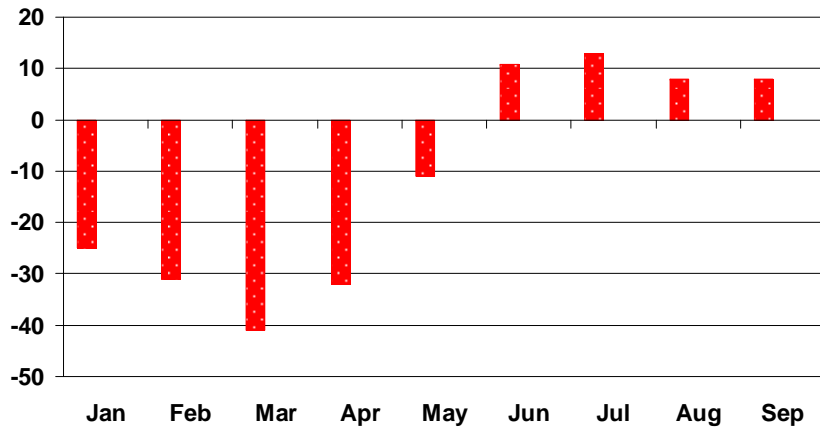
# Implications

- China's stocks will hang over the market
  - Keeps prices and acreage from rising much
- Without China and there has been no growth in world trade over the last decade
- New policy may not be as generous for cotton producers

# Some Perspectives About Livestock

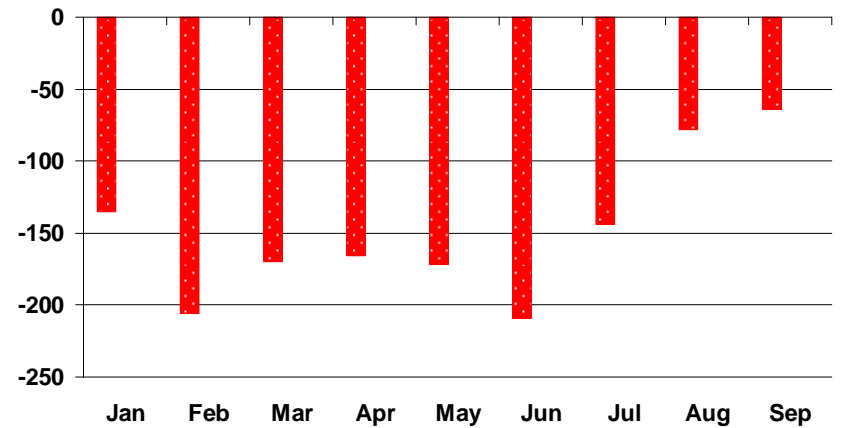
# Net Returns for Hogs

Dollars per head

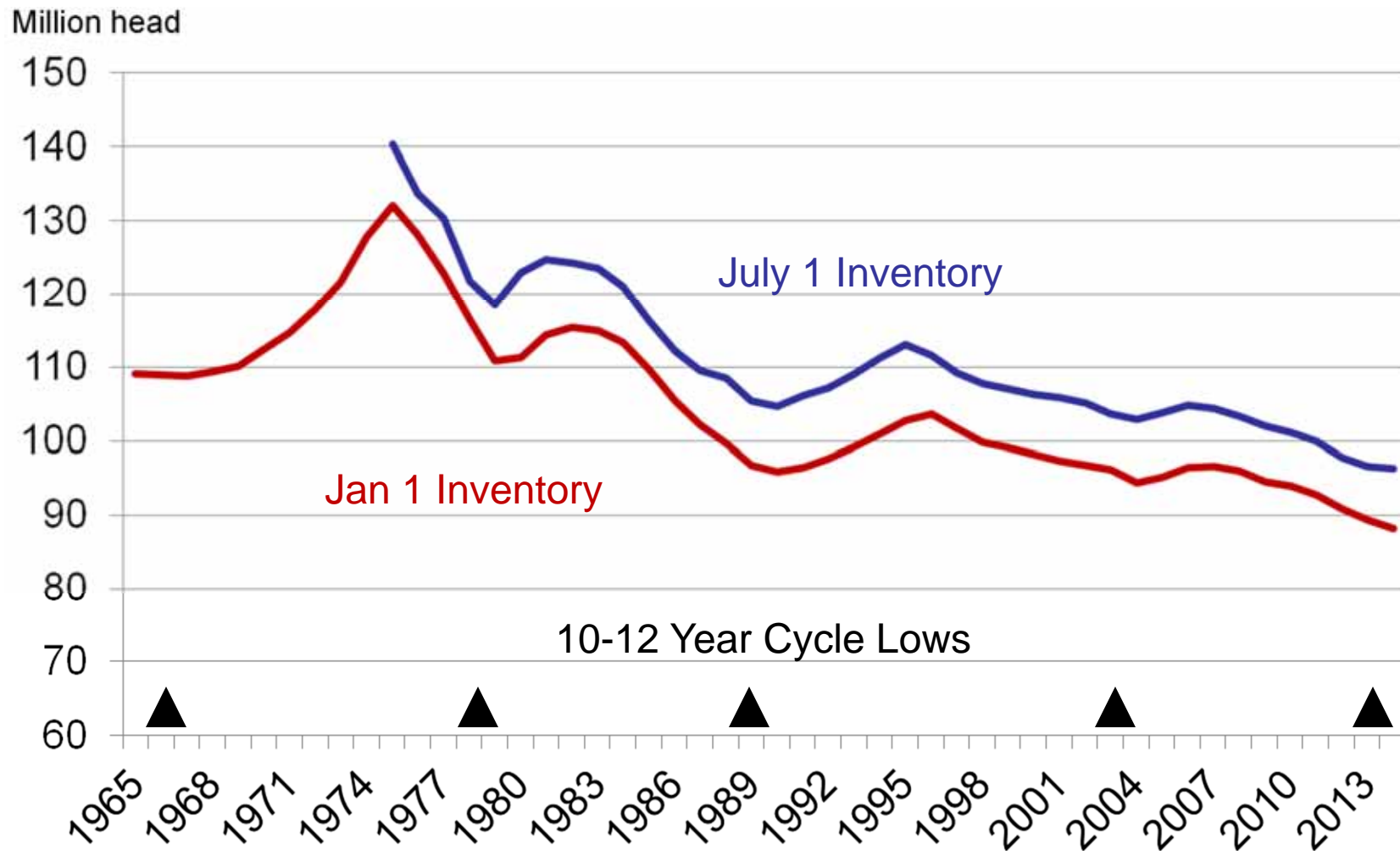


# Net Returns for Cattle

Dollars per head



## Cattle: Herd Continues Contraction Next 1-2 Years



Source: USDA  
\*Doane Projection

# Livestock Producers Face Poor Economics

- Cattle feeders are losing \$100 to \$200 per head
- Hog producers lost an average of nearly \$30 per head January through May but are now in the black
- Poultry production is rising 2% this year and 3% in 2014

**Conditions may improve if feed costs drop**

# Implications

- Modest gains in grain consuming animal units near term
- Feeding rates will increase with better economics
- But feed demand will not increase enough to offset stagnation in ethanol



# The Status of the Farm Bill

# The Situation

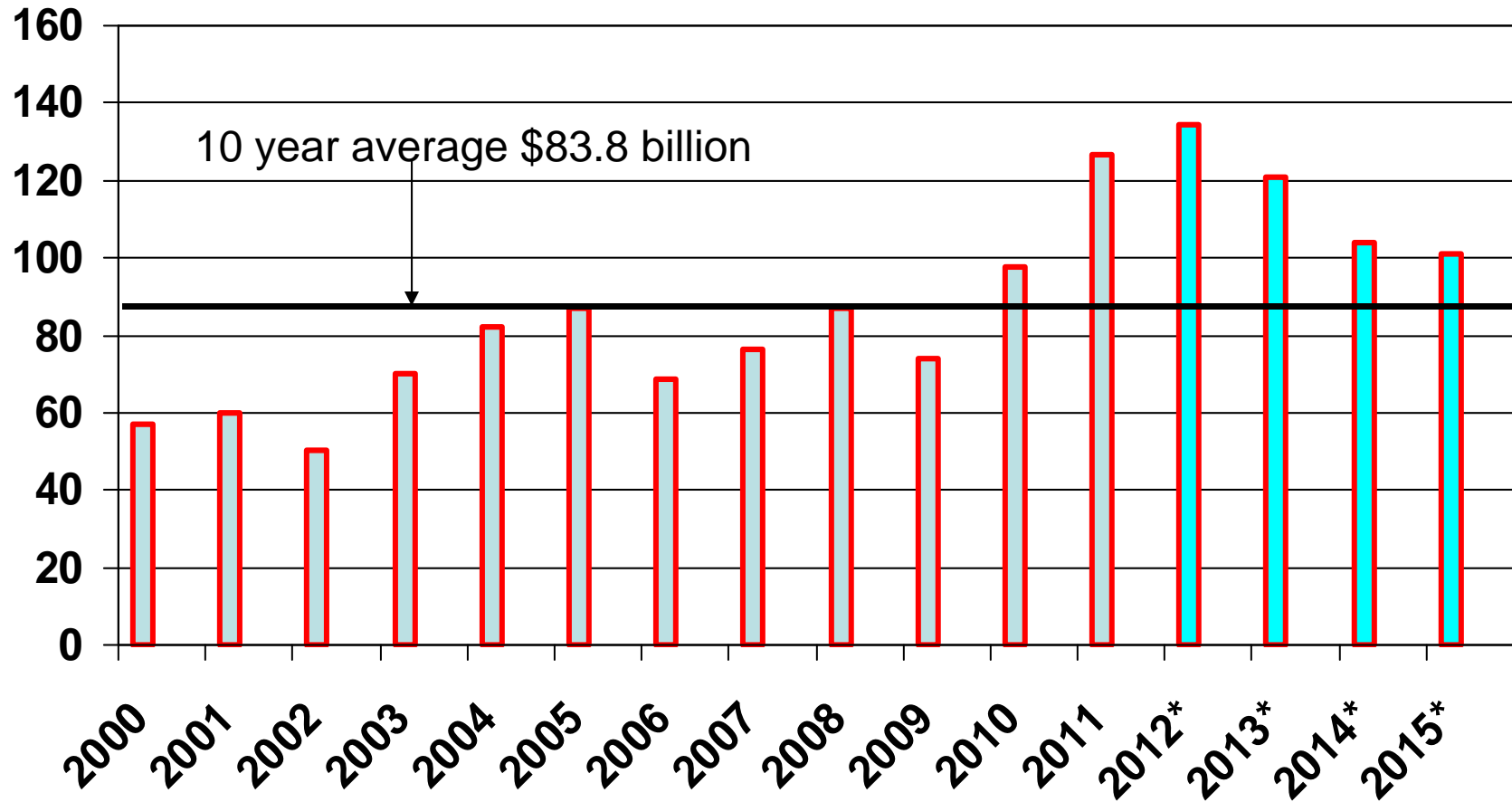
- Current extension of the 2008 bill expired Sept. 30
- New farm bill will expand insurance coverage - Provide protection against low prices
- Counter-cyclical type program will continue

# Implications

- Farm income will take a hit
  - about \$5 billion per year
- But government payments kick in with only modest revenue reductions
- The provisions and timing of a new farm bill are far from certain

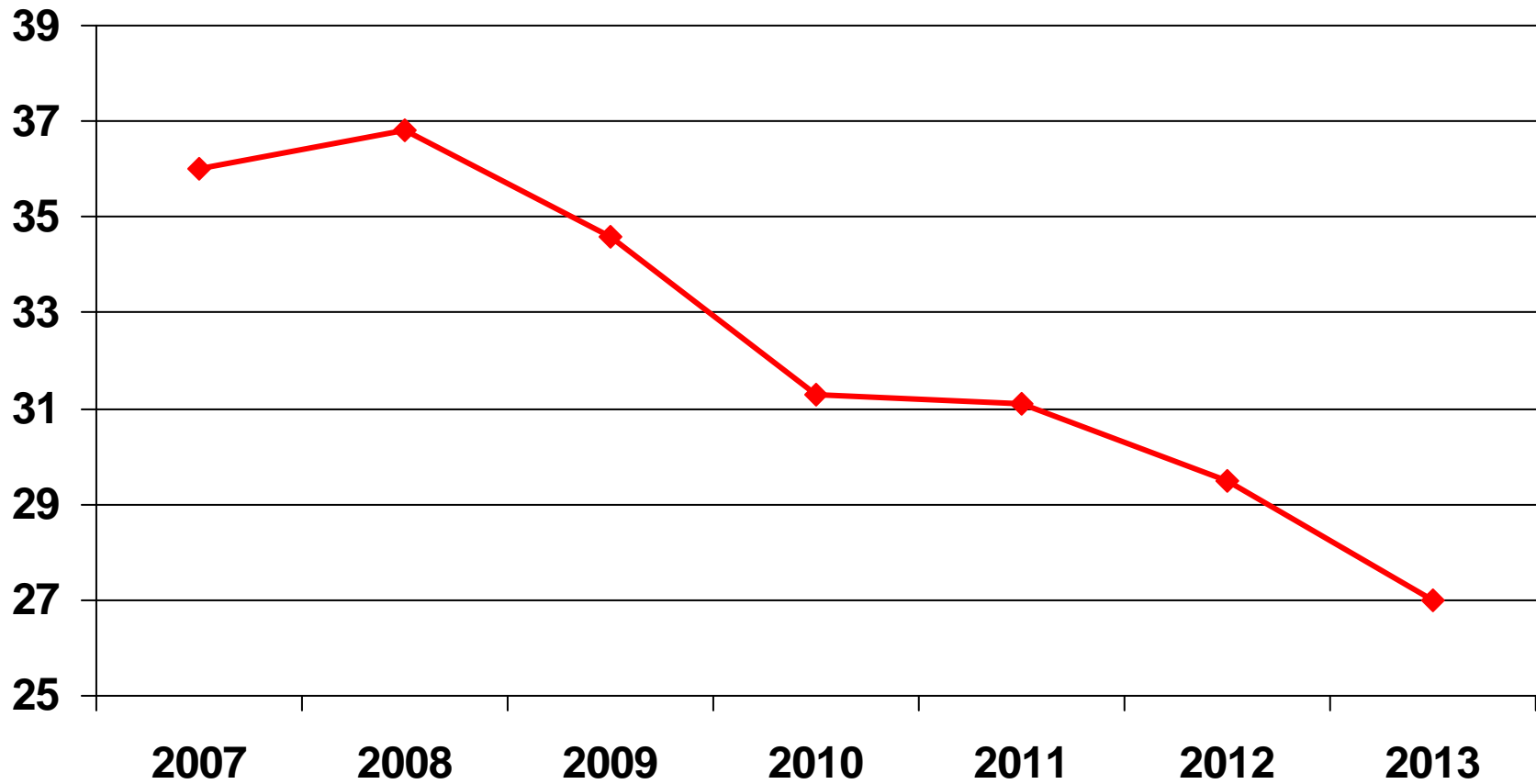
# Net Cash Farm Income

billion dollars



# Land Enrolled in the CRP

million acres



# Land with Expiring CRP Contracts

(thousand acres)

	2013	Land Enrolled	Net Change	Expiring in 2014
<b>Total U.S.</b>	<b>3,309</b>	<b>1,684</b>	<b>-1,622</b>	<b>1985</b>
North Dakota	256	49	-206	146
Texas	362	312	-50	170
Montana	366	146	-220	250
Colorado	224	170	-54	94
Kansas	214	146	-68	120
Missouri	184	80	-103	57
Minnesota	129	26	-104	207
Washington	254	198	-56	140
Iowa	184	47	-136	91
All others	1,136	510	625	710

# Conclusions

- We need a new source of demand growth for corn
  - China may be it (or not)
- We need to see lower corn acres – and maybe wheat acres too.
- EPA's decisions about biofuels will be important
- We need big export gains
- The future of the farm bill remains uncertain

**Questions??**