



United States Department of Agriculture

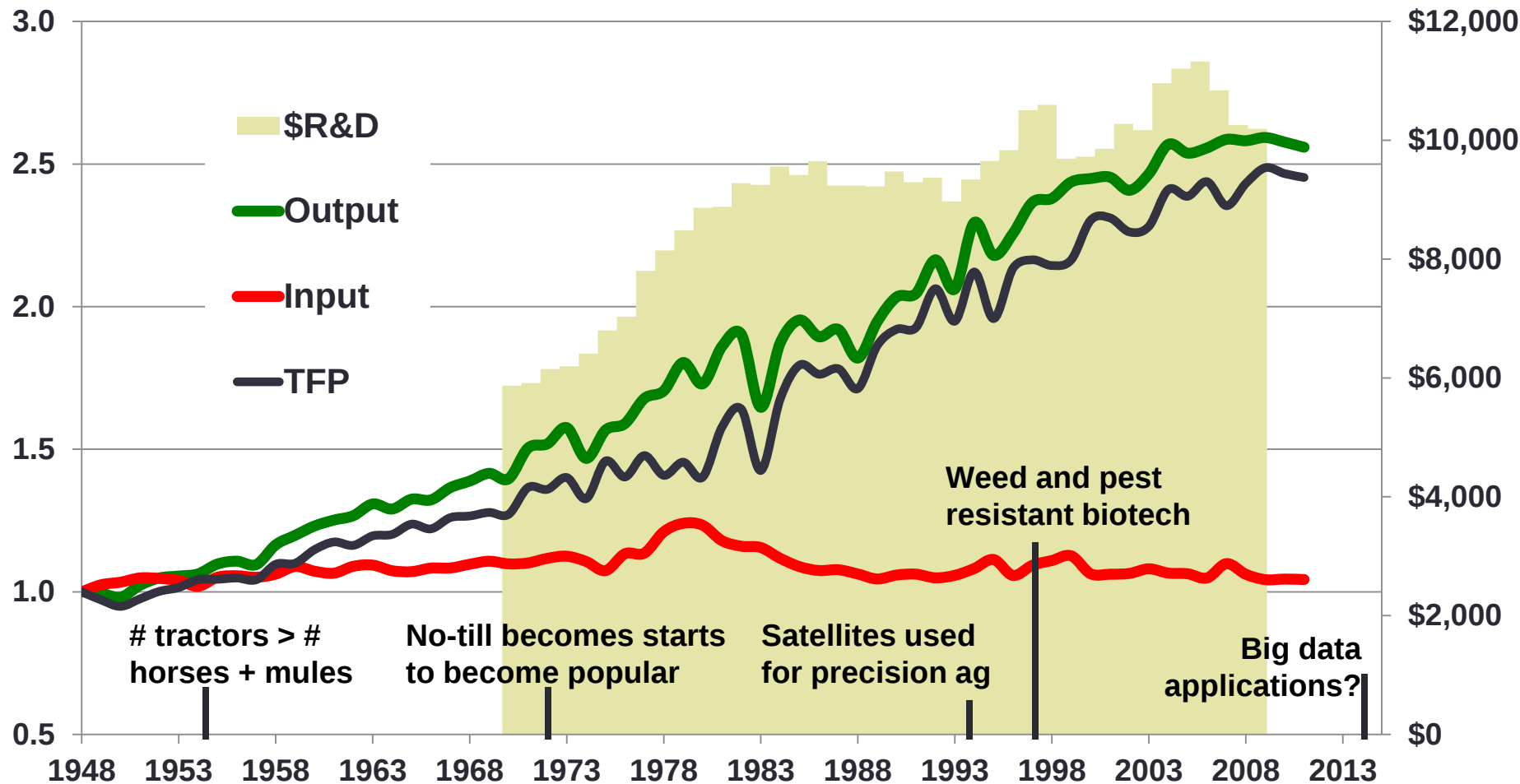
# OUTLOOK FOR US AGRICULTURE

**Rob Johansson**  
**Acting Chief Economist**  
**19 February 2015**

# Next boost to productivity: Big Data?

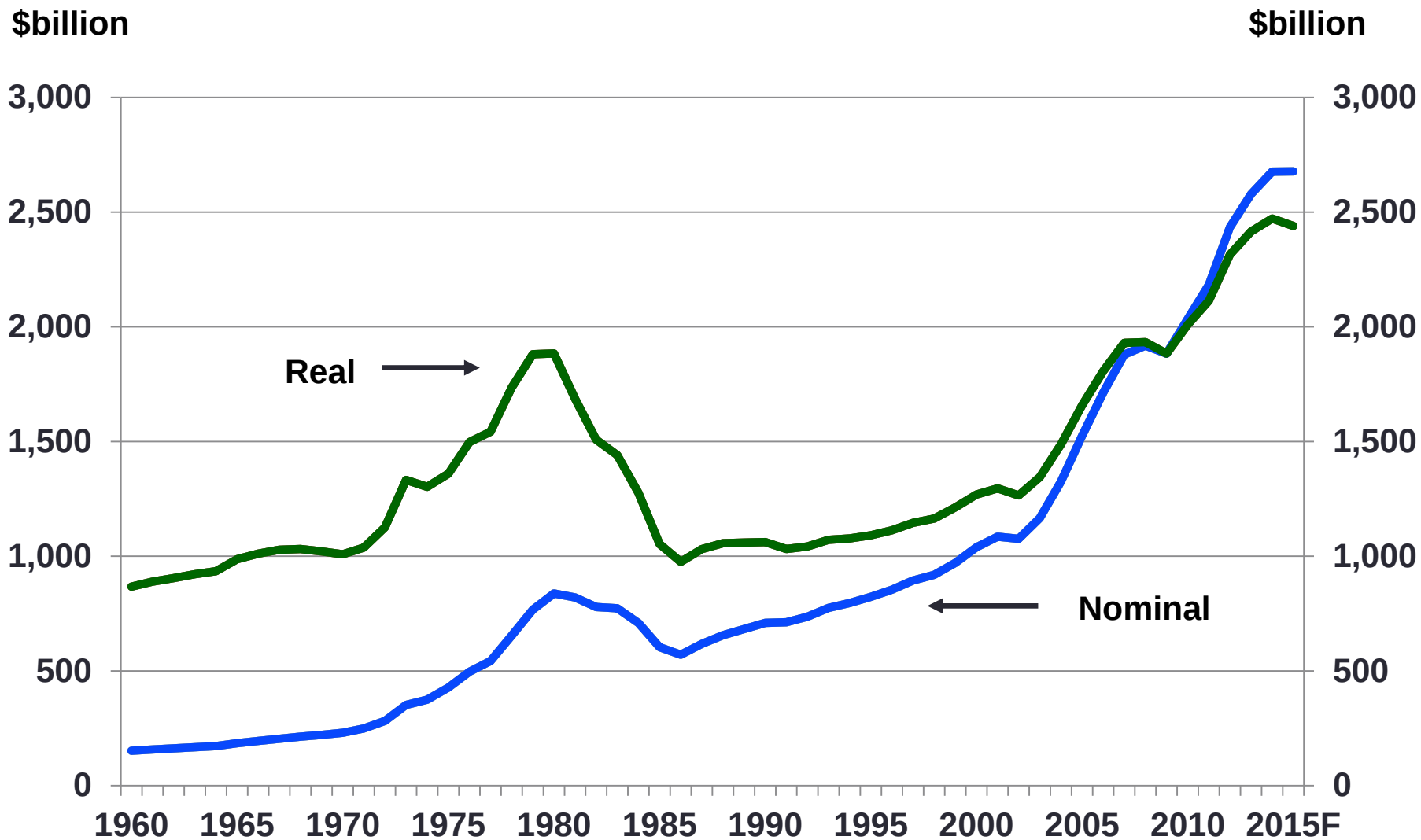
Index: 1948 = 1.0

\$million (2006 dollars)



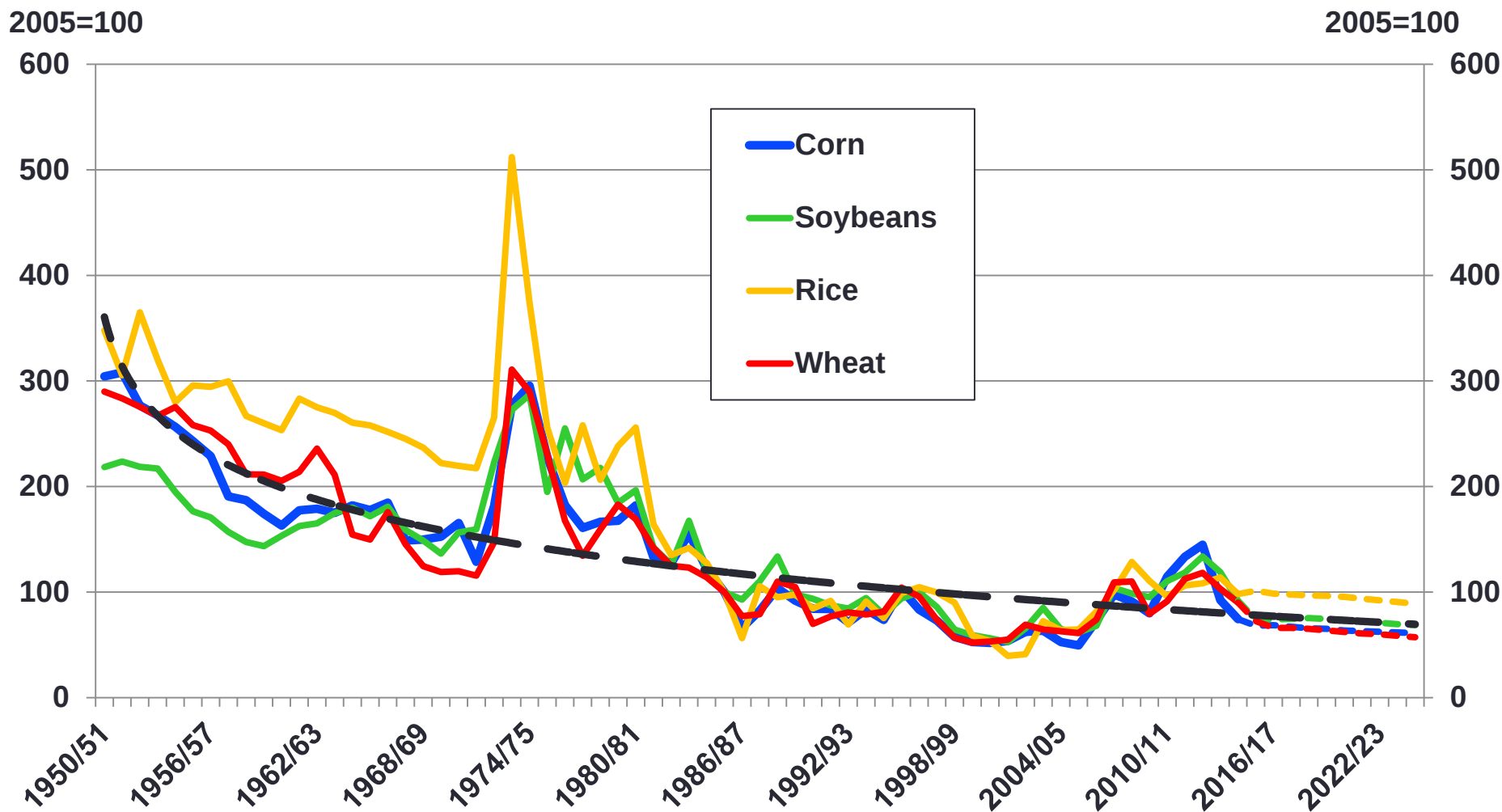
Source: USDA-ERS.

# Record farm equity (net worth) in 2015

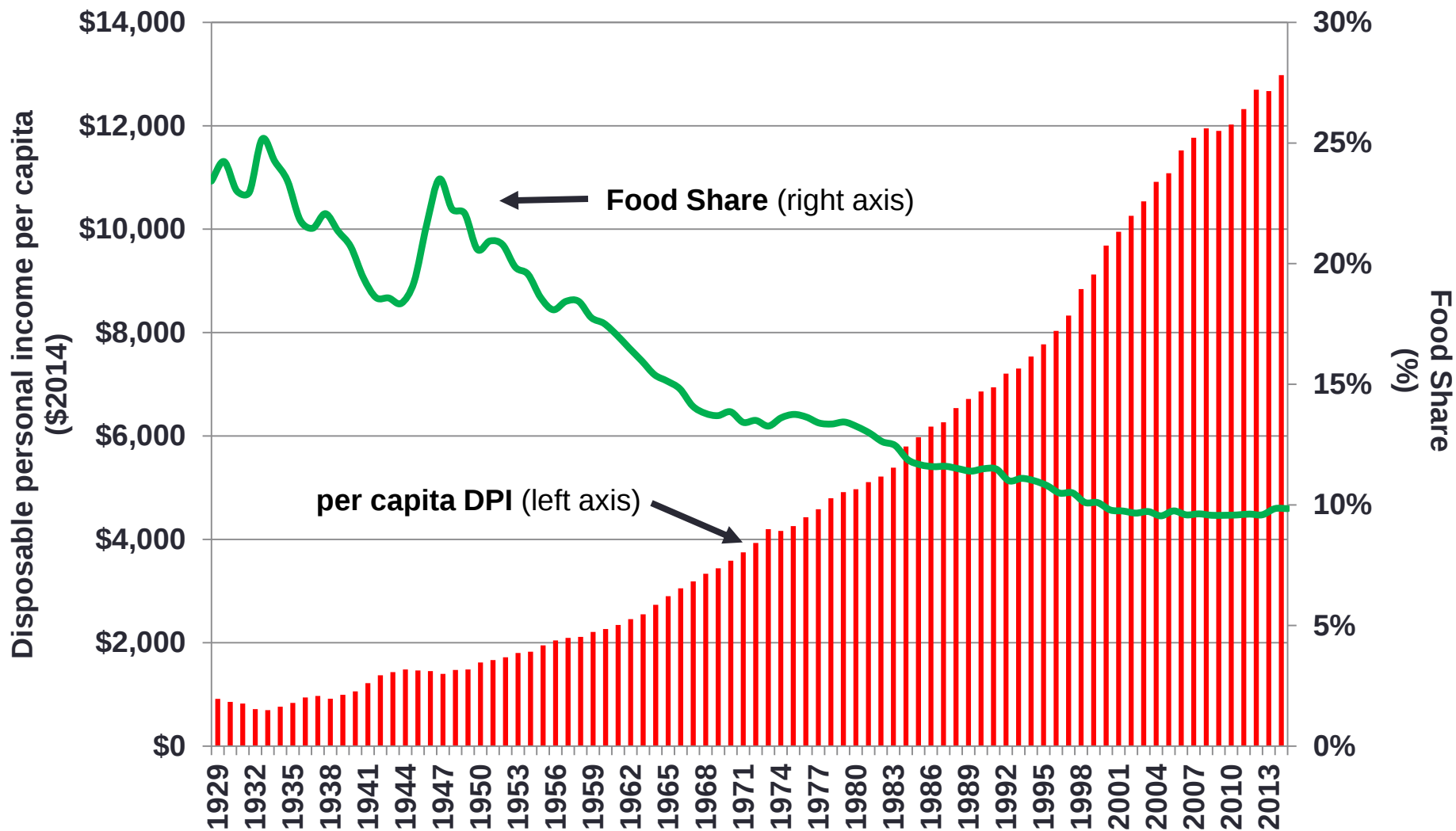


Data: USDA-ERS.

# Real commodity prices have been trending down for the past 60+ years



# Percent of income spent on food

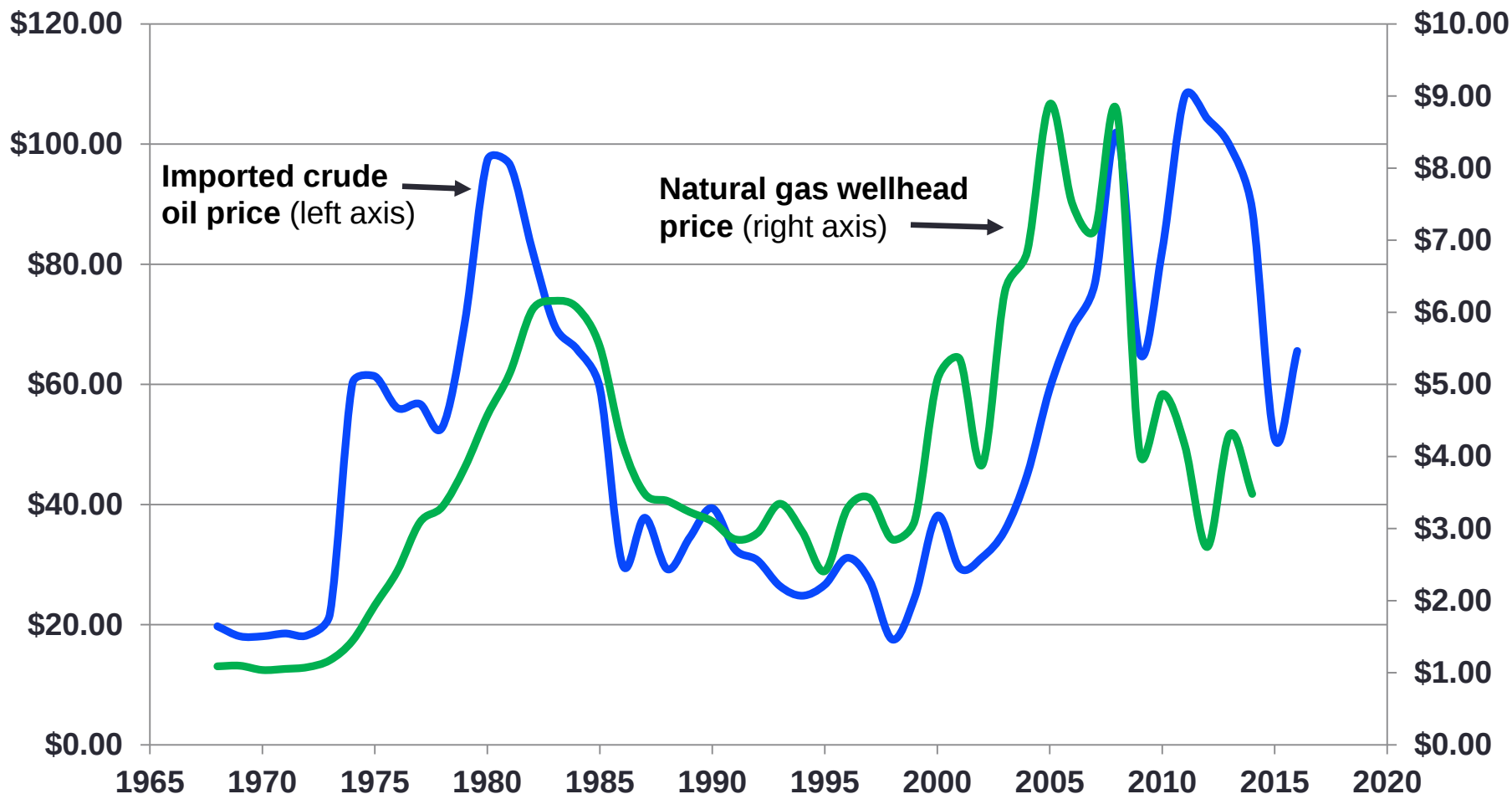


Source: Schnepf (2013), BEA, USDA-ERS.

# Recent declines in energy prices help bottom line

Dollars per barrel (\$2015)

Dollars per Mcf (\$2015)

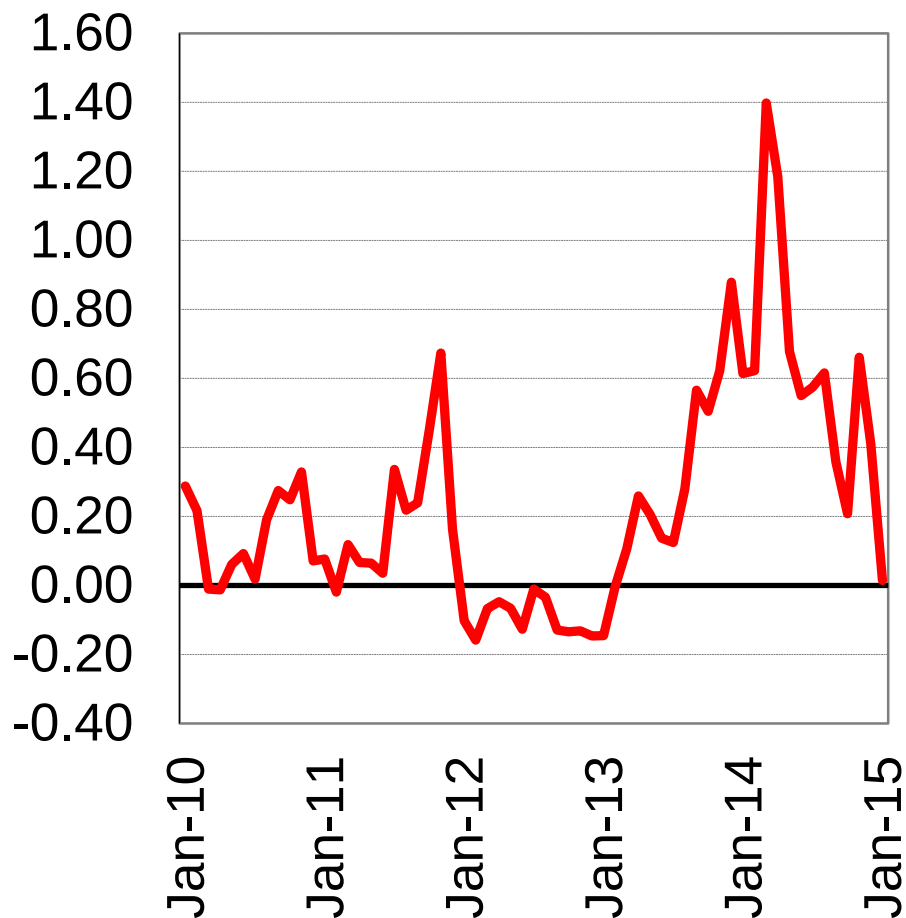


Source: EIA.

# Ethanol margin tightens but production high

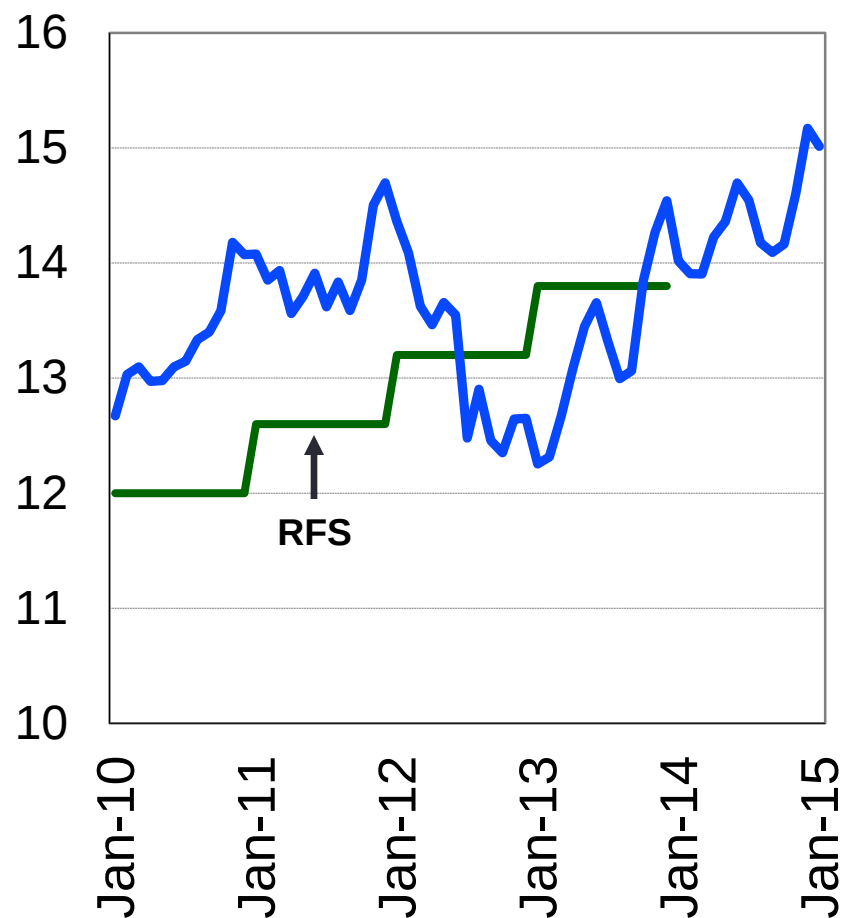
## Ethanol Margin<sup>1</sup>

\$ per gallon



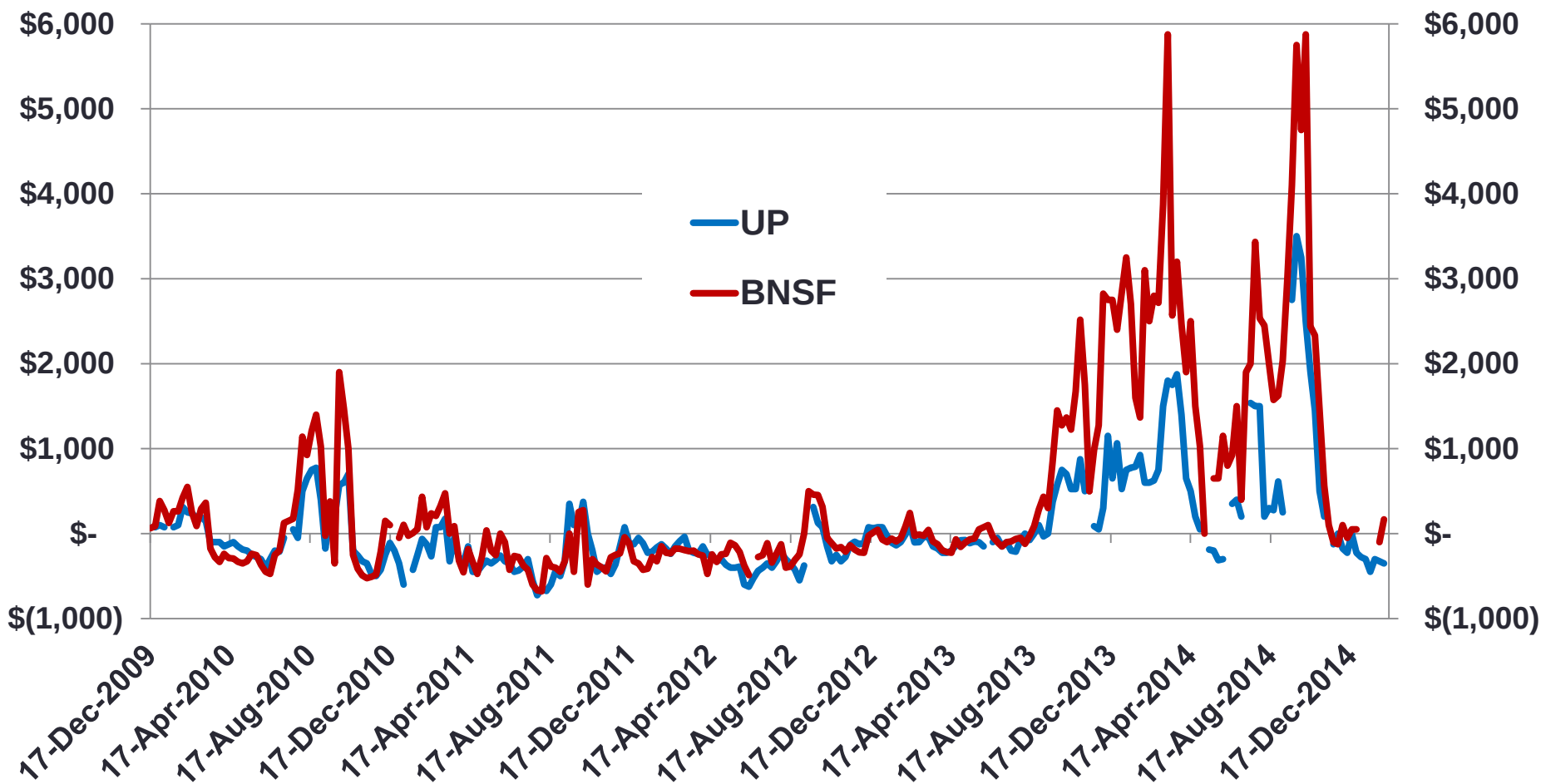
## Ethanol Production<sup>2</sup>

annualized rate in billion gallons



# Rail transport costs return to normal levels in 2015

Average secondary railcar shuttle market bids per car

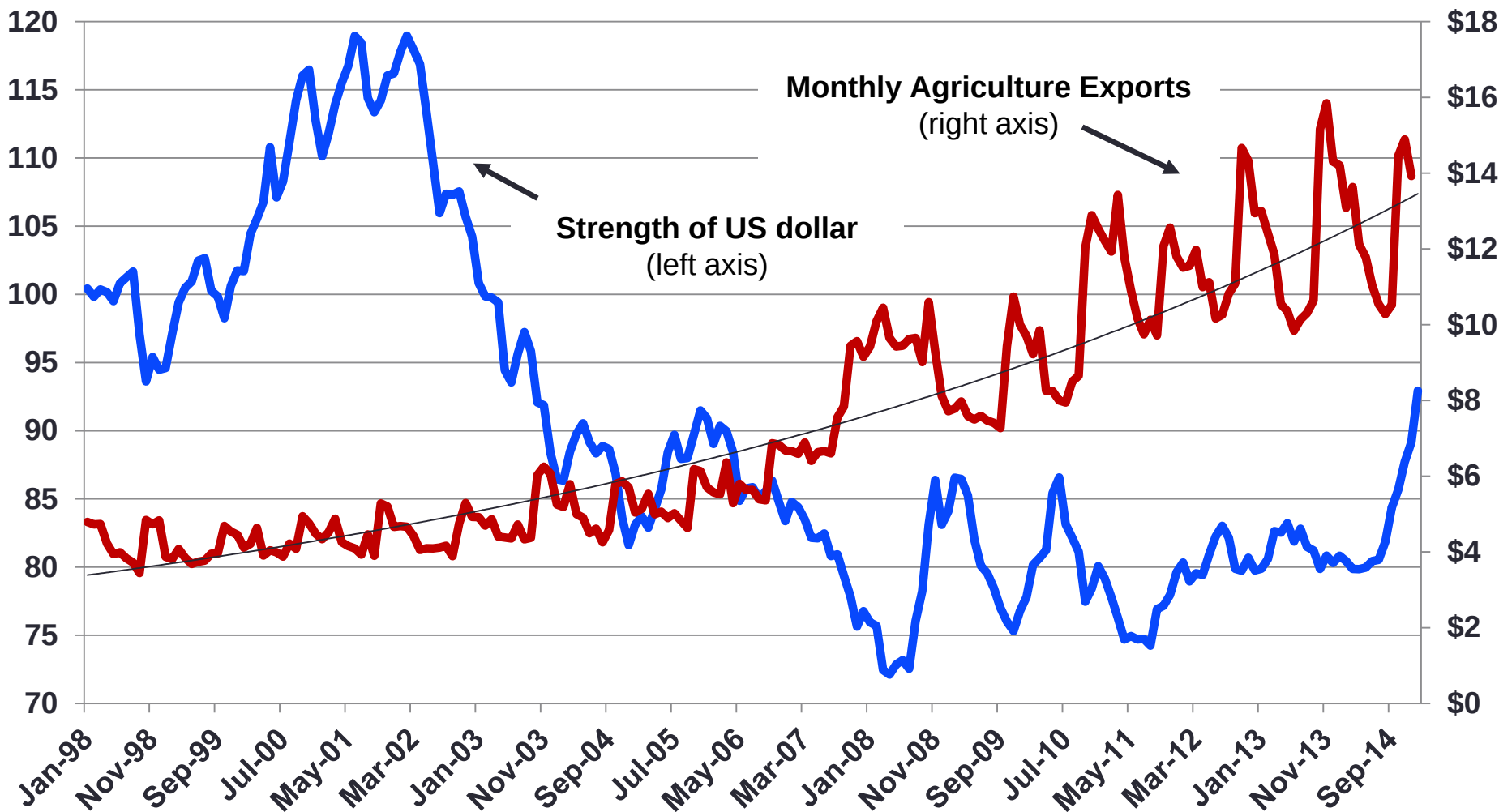


Source: USDA Grain Transportation Report

# The dollar strengthens, but trade still trends up

2000 = 100

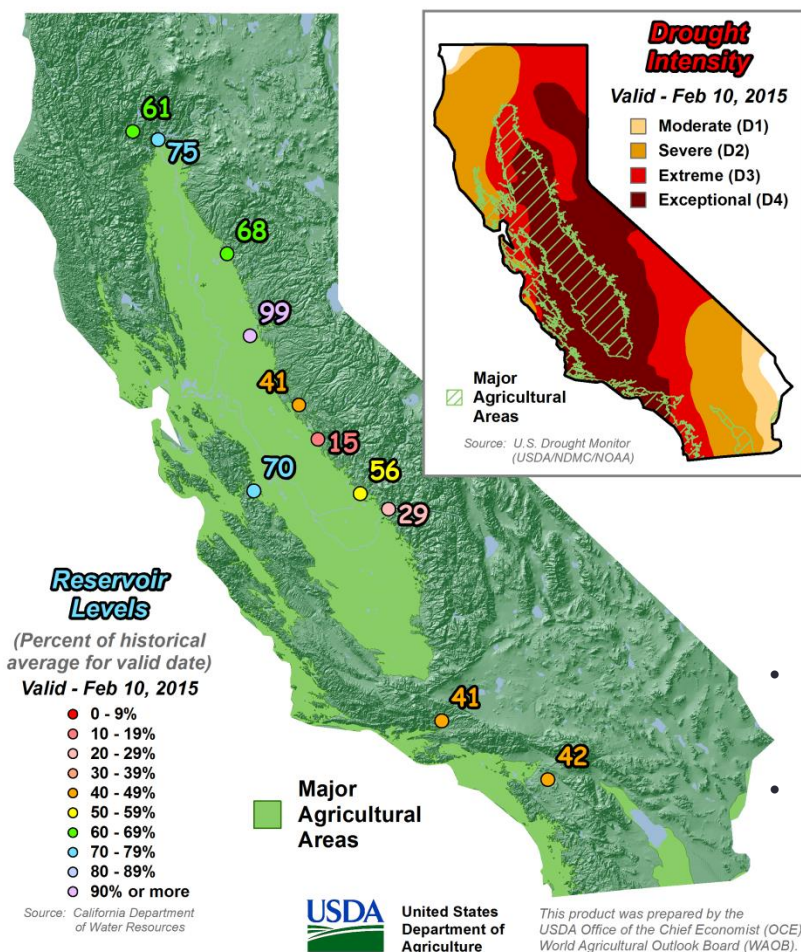
Billion dollars (nominal)



# Drought outlook improves, but intensifies in Southwest

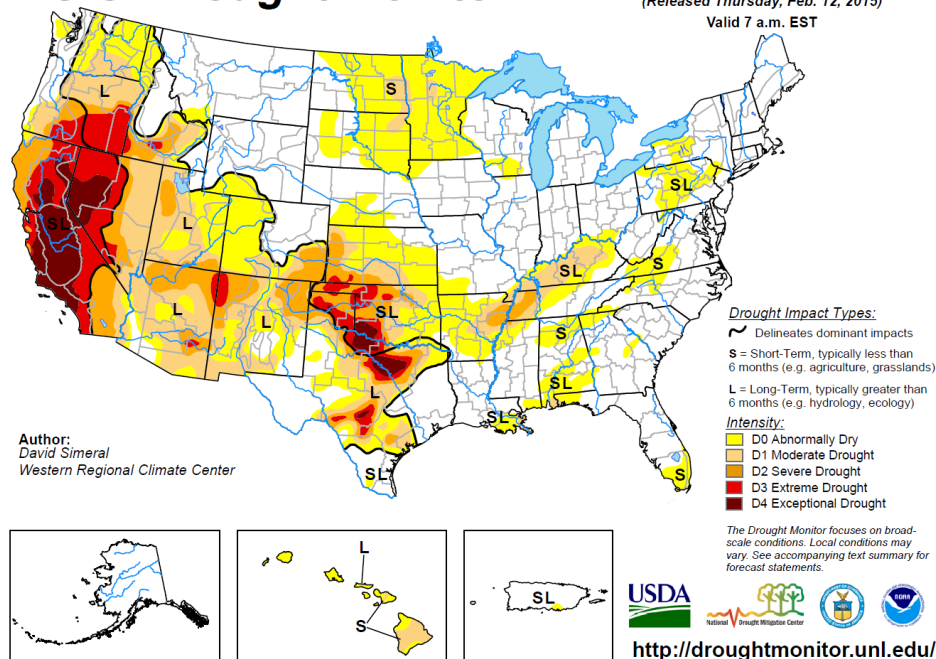
## California Reservoir & Drought Monitor

Updated - February 12, 2015



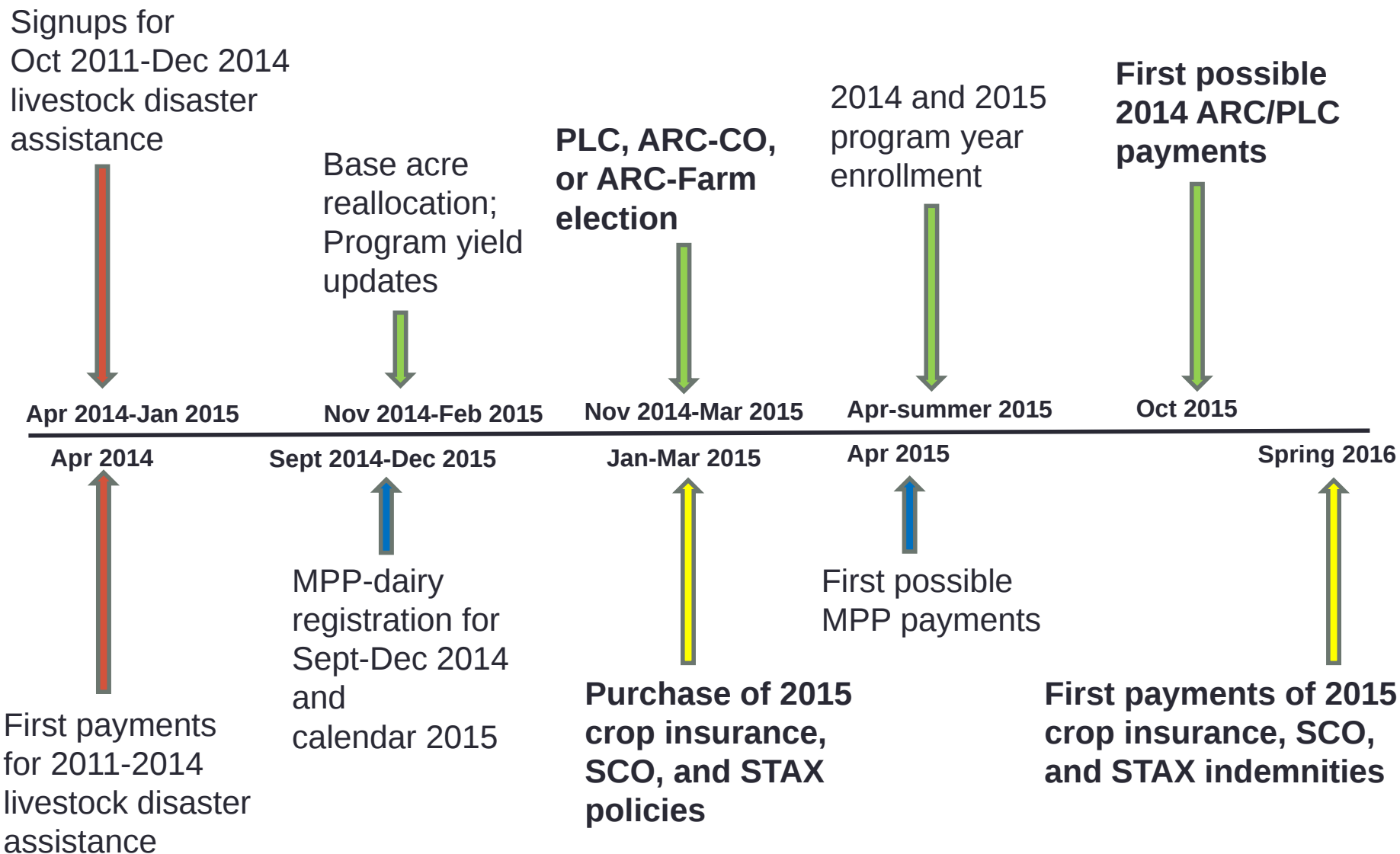
## U.S. Drought Monitor

February 10, 2015  
(Released Thursday, Feb. 12, 2015)  
Valid 7 a.m. EST



- Area of California in Extreme to Exceptional drought (D3-D4) rose since last year (approximately 67% vs. 61% on Feb 11, 2014);
- California statewide average snow water equivalent as of February 10, 2015 is 6" (27% of normal for this time of year and 19% of the April 1 end-of-season total. SOURCE: California Cooperative Snow Surveys).

# Farm Bill implementation progressing

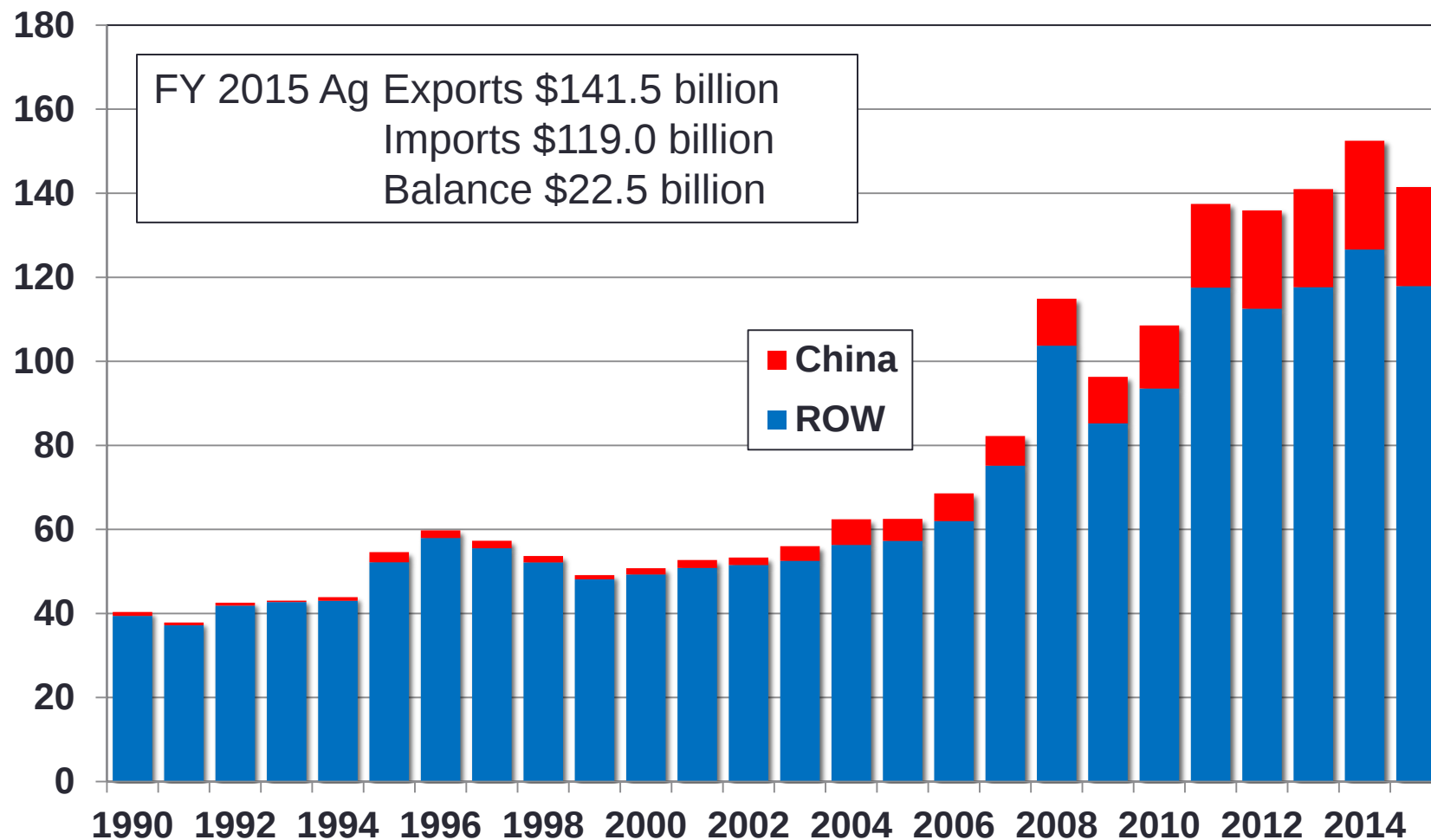


# Ag Trade Outlook

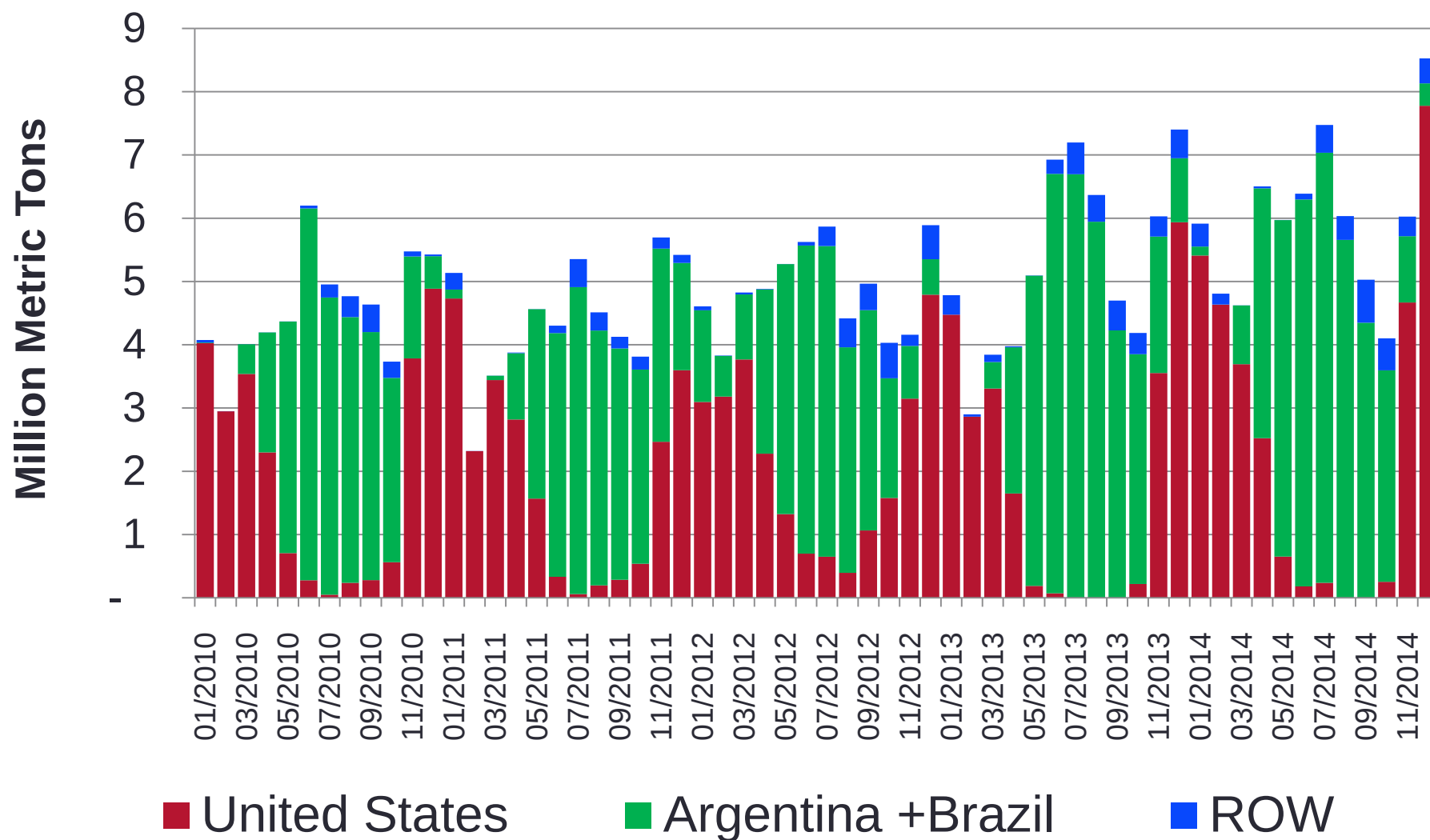


# Second highest year for exports expected; China remains top destination

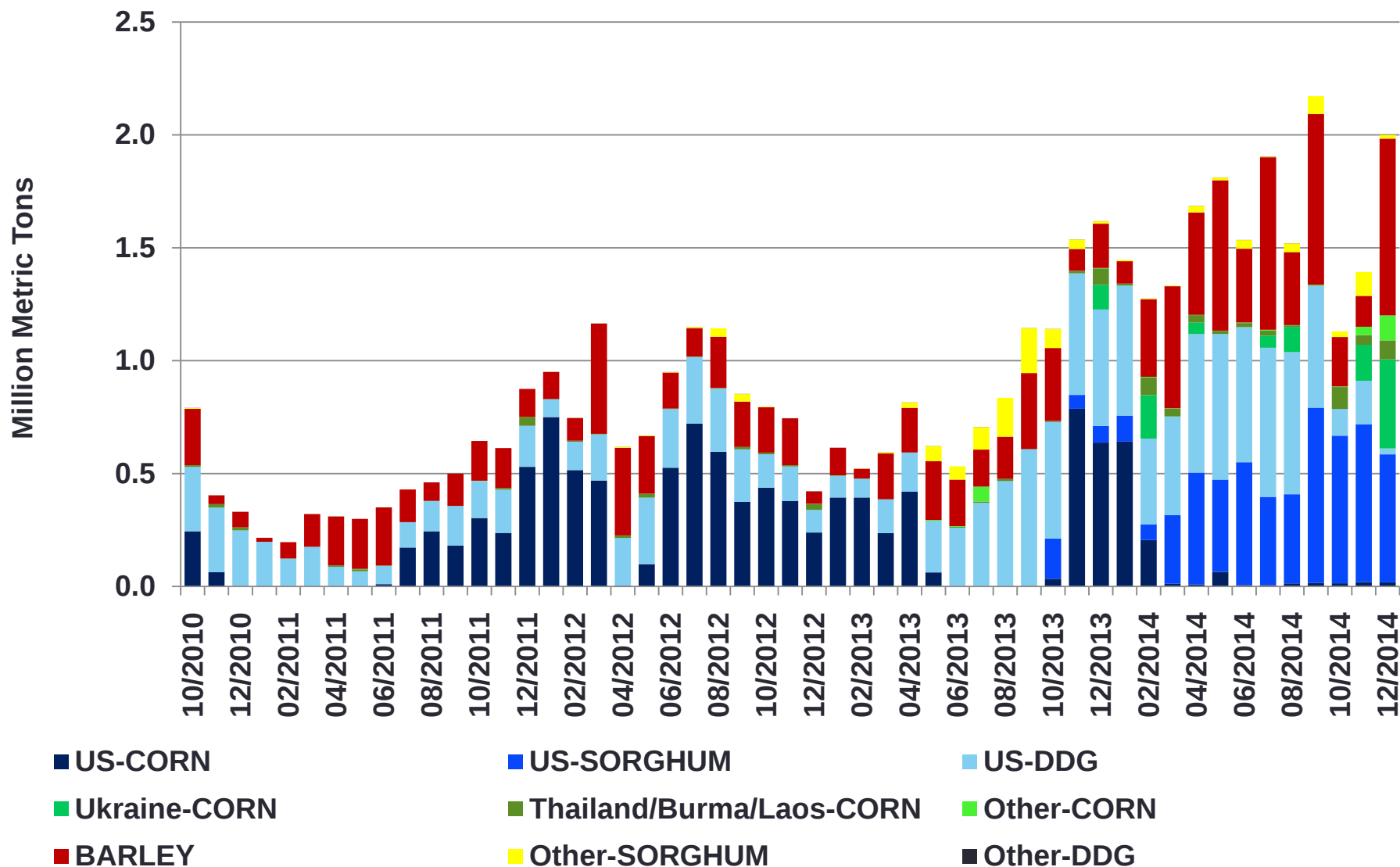
\$billion



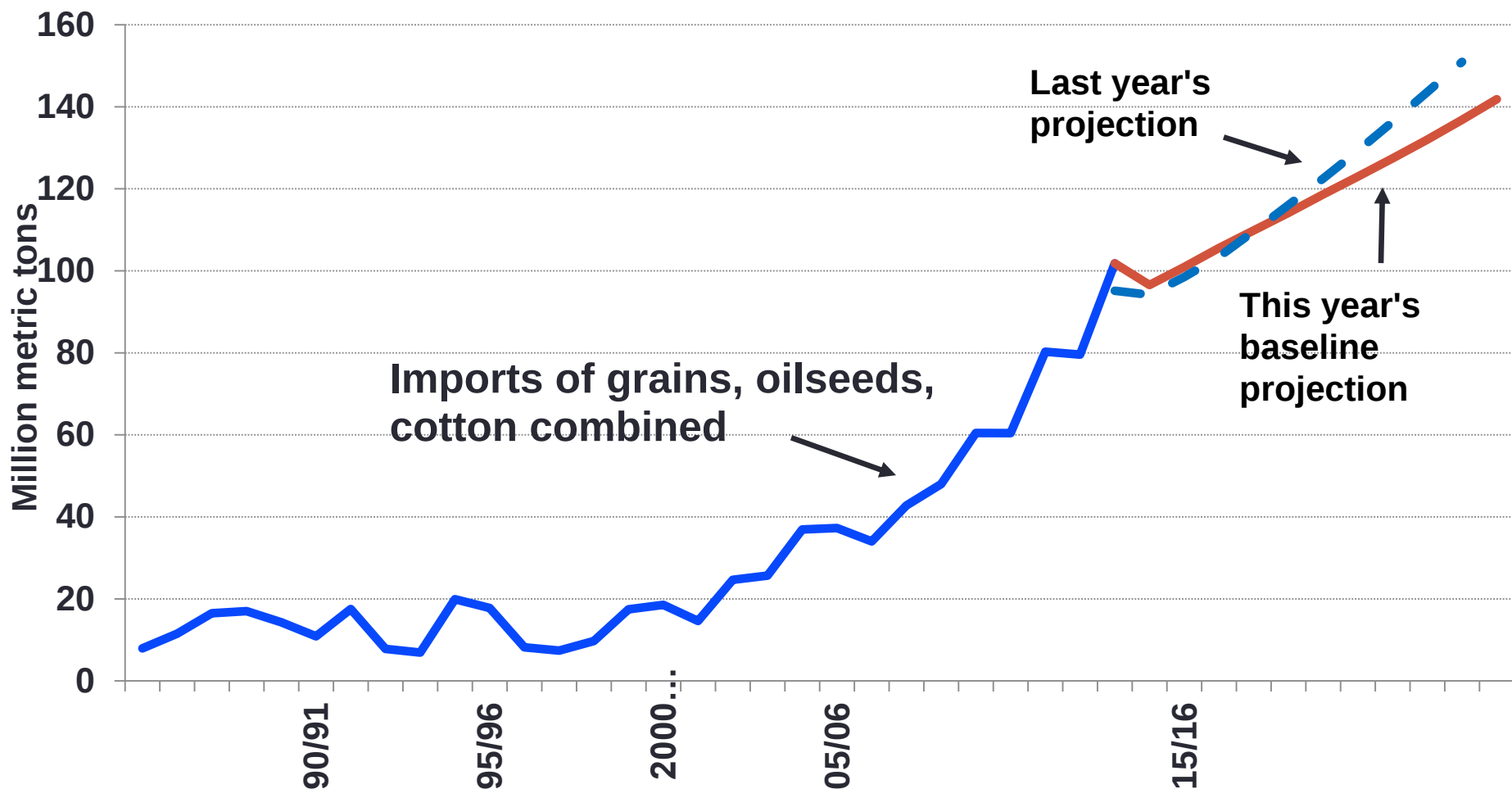
# Monthly Chinese soybean imports



# Monthly Chinese corn/barley/sorghum imports

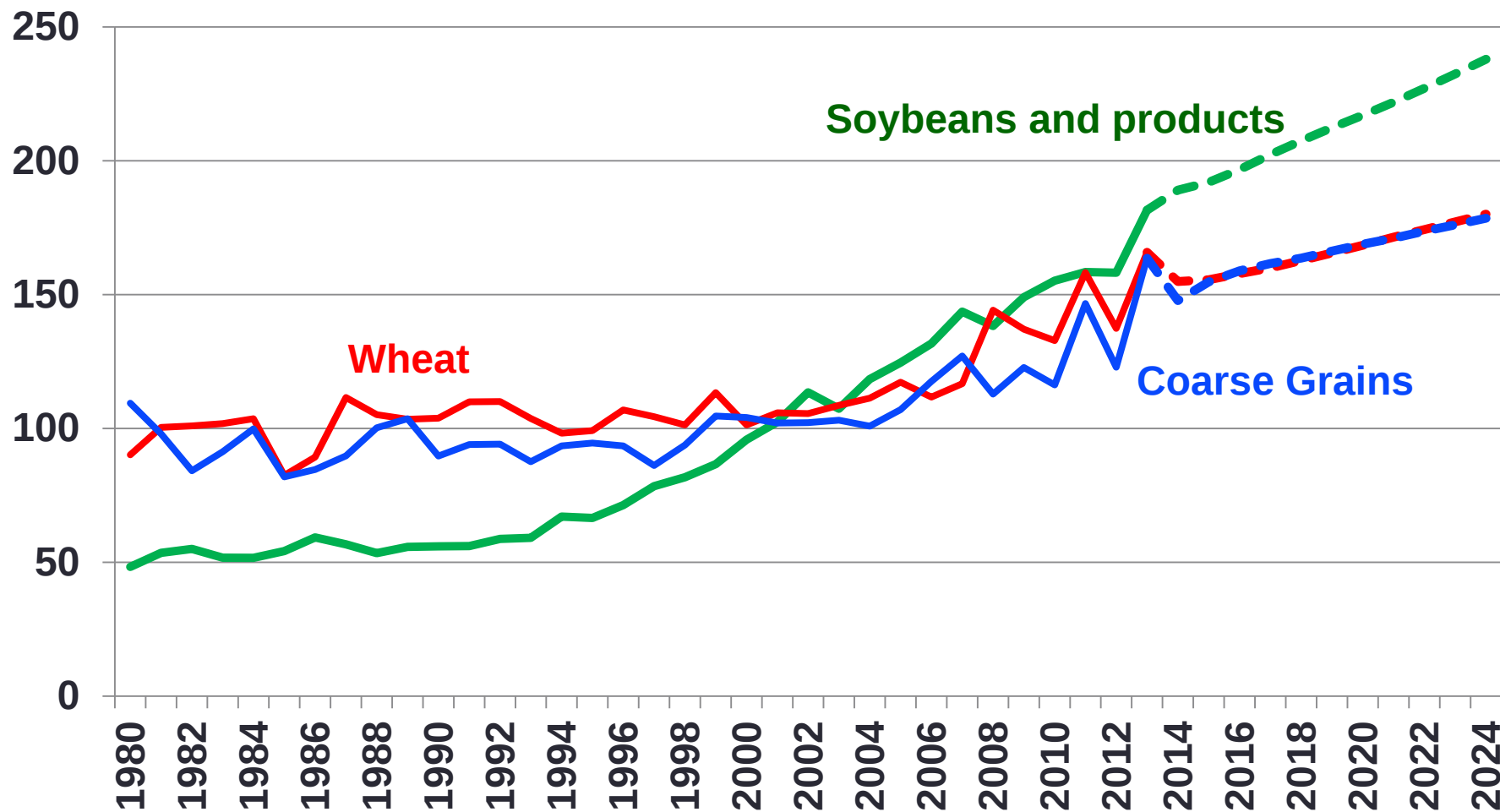


# Projections down slightly for China imports, but still increasing



# Global trade growth is expected to continue

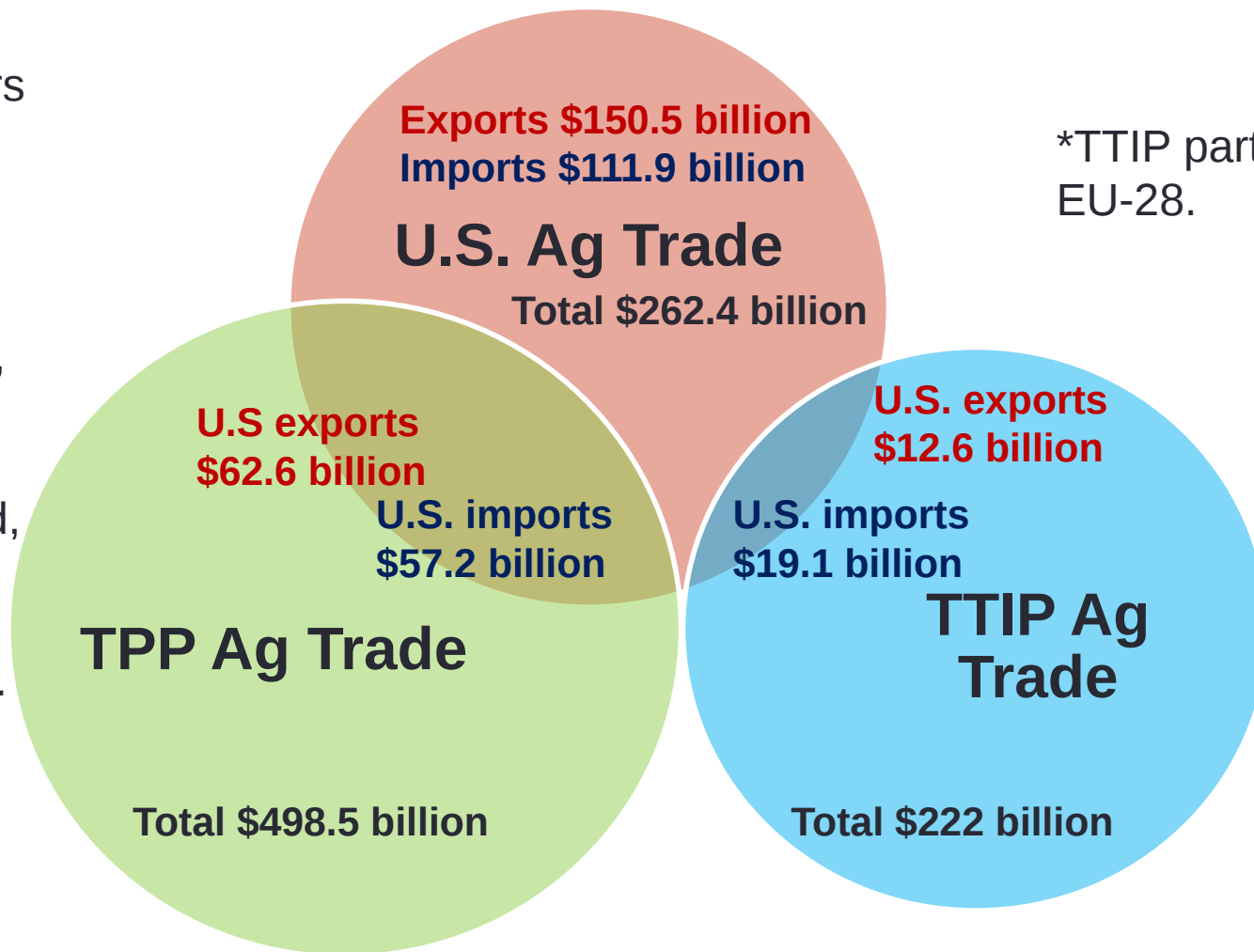
million metric tons



# TPP\* and TTIP\*: Room to grow

\*TPP partners include Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam.

\*TTIP partner is EU-28.



# Outlook for Crops



# Global grain ending stocks build strength

| Crop     | Average<br>2000-2003 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15    |
|----------|----------------------|---------|---------|---------|---------|---------|---------|------------|
|          | <i>Days of use</i>   |         |         |         |         |         |         |            |
| Wheat    | 112                  | 97      | 113     | 111     | 104     | 93      | 98      | <b>101</b> |
| Corn     | 82                   | 69      | 65      | 56      | 57      | 58      | 67      | <b>71</b>  |
| Rice     | 115                  | 77      | 79      | 82      | 86      | 86      | 82      | <b>75</b>  |
| Soybeans | 74                   | 71      | 93      | 103     | 77      | 80      | 89      | <b>113</b> |
| Cotton   | 190                  | 206     | 145     | 160     | 259     | 305     | 340     | <b>360</b> |

Numbers in **red** denote record levels.

# Corn, wheat, and soybean prices still historically strong, given record output

|               | 2000-2003 average | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16F |
|---------------|-------------------|---------|---------|---------|---------|---------|---------|---------|----------|
| Wheat         | 3.09              | 6.78    | 4.87    | 5.70    | 7.24    | 7.77    | 6.87    | 6.00    | 5.10     |
| Corn          | 2.14              | 4.06    | 3.55    | 5.18    | 6.22    | 6.89    | 4.46    | 3.65    | 3.50     |
| Soybeans      | 5.45              | 9.97    | 9.59    | 11.30   | 12.50   | 14.40   | 13.00   | 10.20   | 9.00     |
| Upland Cotton | 46.48             | 47.80   | 62.90   | 81.50   | 88.30   | 72.50   | 77.90   | 61.00   | 60.00    |
| All Rice      | 5.61              | 16.80   | 14.40   | 12.70   | 14.50   | 15.10   | 16.30   | 14.00   | 13.10    |

*Wheat, corn and soybeans in dollars per bushel; rice in dollars per hundredweight; upland cotton in cents per pound.*

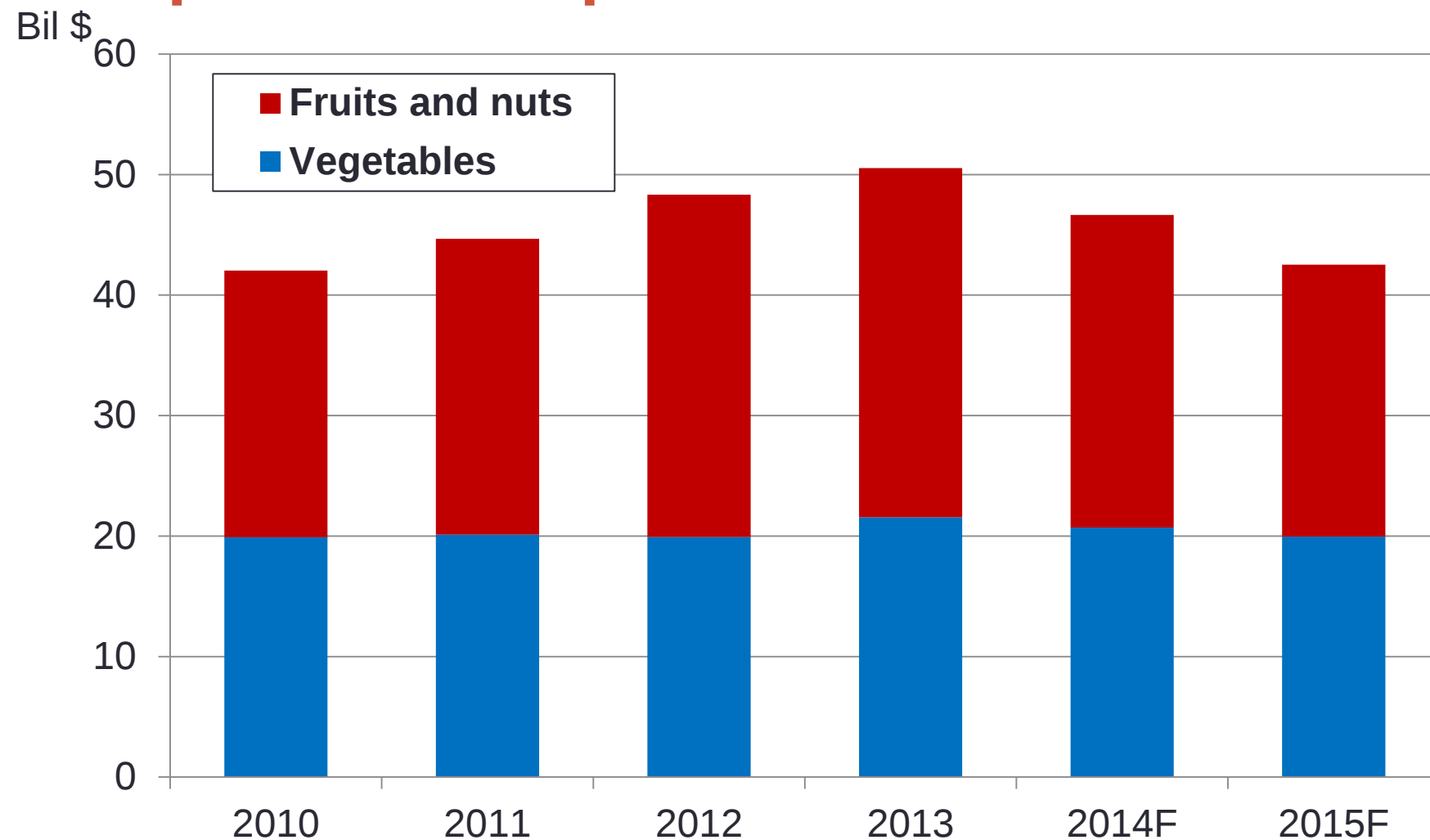
*Numbers in red denote record levels.*

# Cropland area expected to remain high in 2015, but down from last year

| Crop<br>(mil.<br>acres)       | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015F | Percent<br>change |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------------------|
| Corn                          | 86.4  | 88.2  | 91.9  | 97.2  | 95.4  | 90.6  | 89.0  | -1.8%             |
| Soybeans                      | 77.5  | 77.4  | 75.0  | 77.2  | 76.8  | 83.7  | 83.5  | -0.2%             |
| Wheat                         | 59.0  | 52.6  | 54.3  | 55.3  | 56.2  | 56.8  | 55.5  | -2.3%             |
| All cotton <sup>1</sup>       | 9.1   | 11.0  | 14.7  | 12.3  | 10.4  | 11.0  | 9.7   | -12.1%            |
| Minor feed<br>grains          | 13.5  | 11.4  | 10.4  | 12.6  | 14.6  | 12.8  | 14.0  | 9.1%              |
| Rice                          | 3.1   | 3.6   | 2.7   | 2.7   | 2.5   | 2.9   | 2.9   | -1.3%             |
| Total 8<br>crops <sup>1</sup> | 248.7 | 244.2 | 249.0 | 257.4 | 255.9 | 257.9 | 254.6 | -1.3%             |
| CRP                           | 33.7  | 31.3  | 31.1  | 29.5  | 26.8  | 25.5  | 24.2  | -5.1%             |
| 8 crops +<br>CRP <sup>1</sup> | 282.4 | 275.5 | 280.2 | 286.9 | 282.8 | 283.5 | 278.8 | -1.6%             |

Source: USDA-World Ag Outlook Board <sup>1</sup>all cotton, includes both upland and ELS cotton

# Specialty crop revenues expected to drop in 2015



# Livestock outlook

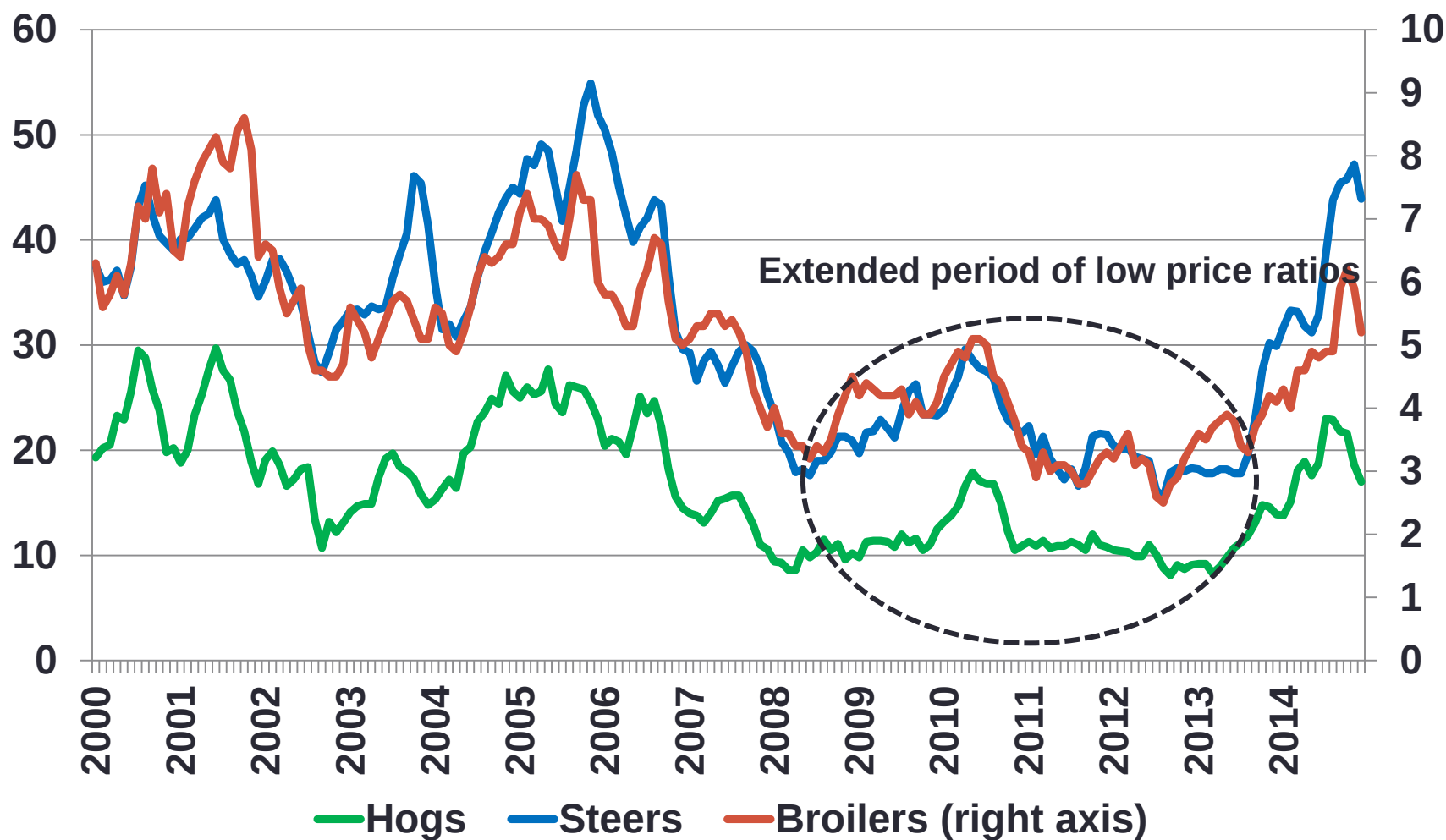


# Pork, dairy and poultry production higher in 2015

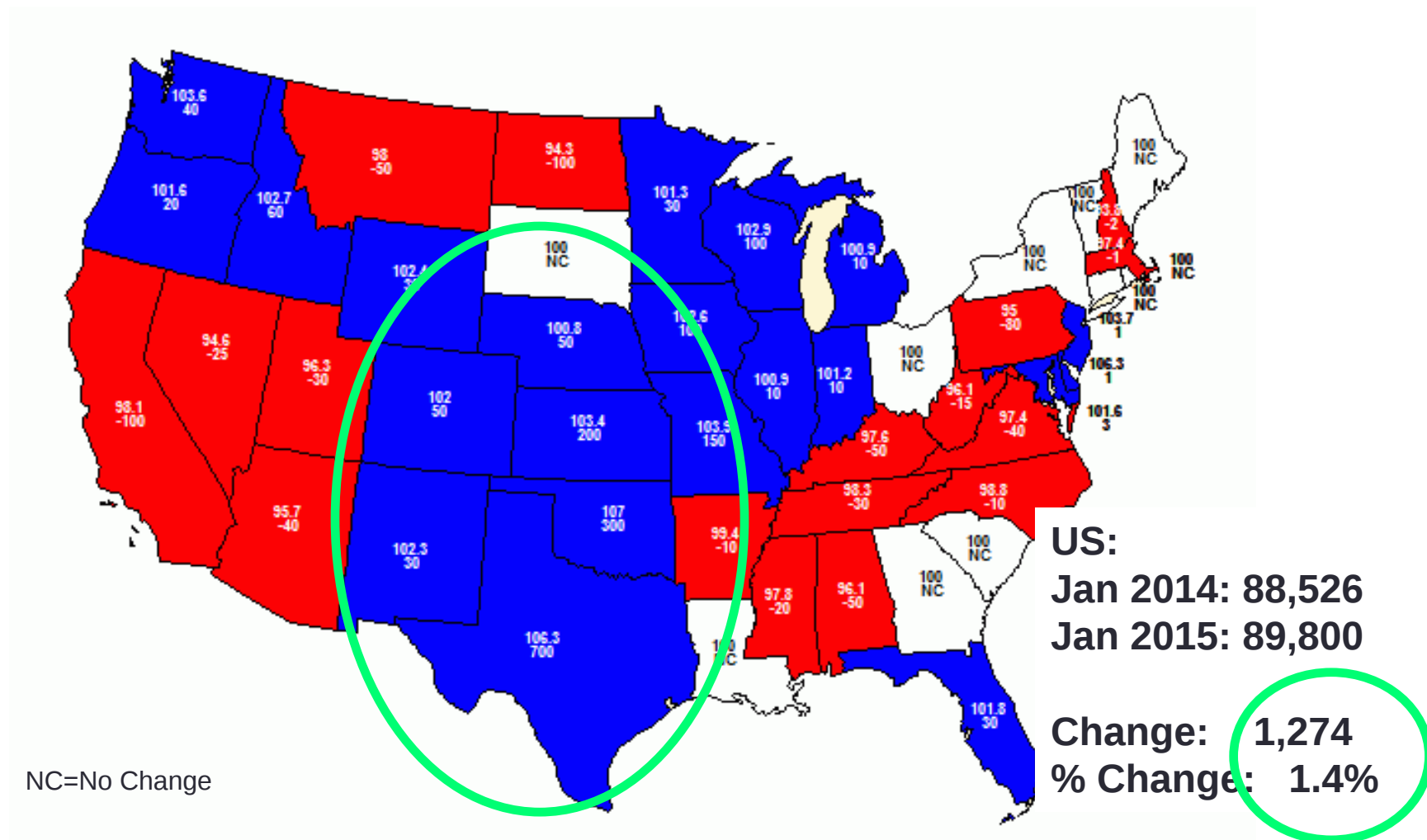
| Animal products | 2010  | 2011  | 2012  | 2013  | 2014  | 2015F        | % Change 2015/14 |
|-----------------|-------|-------|-------|-------|-------|--------------|------------------|
| Billion Pounds  |       |       |       |       |       |              |                  |
| Beef            | 26.30 | 26.20 | 25.91 | 25.72 | 24.25 | 24.22        | -0.1%            |
| Pork            | 22.44 | 22.76 | 23.25 | 23.19 | 22.84 | <b>24.09</b> | 5.5%             |
| Broilers        | 36.91 | 37.20 | 37.04 | 37.83 | 38.55 | <b>39.95</b> | 3.6%             |
| Total Meat      | 92.10 | 92.75 | 92.96 | 93.33 | 92.17 | <b>95.13</b> | 3.2%             |
| Billion Pounds  |       |       |       |       |       |              |                  |
| Milk            | 192.9 | 196.3 | 200.6 | 201.2 | 206.0 | <b>211.5</b> | 2.7%             |

Prices in red denote record levels.

# Feed price ratios improved since 2013

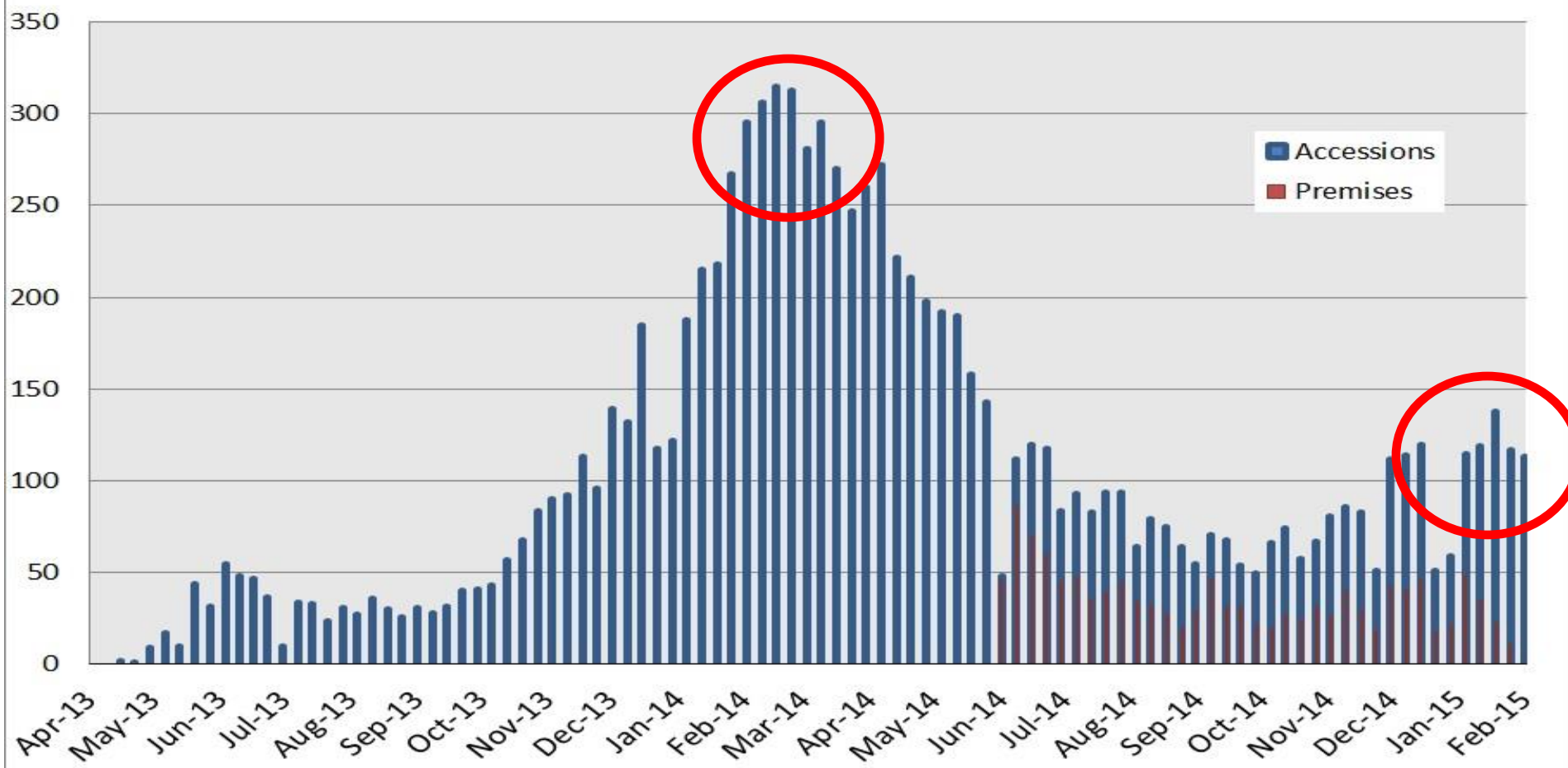


# Cattle inventory up – January 2015

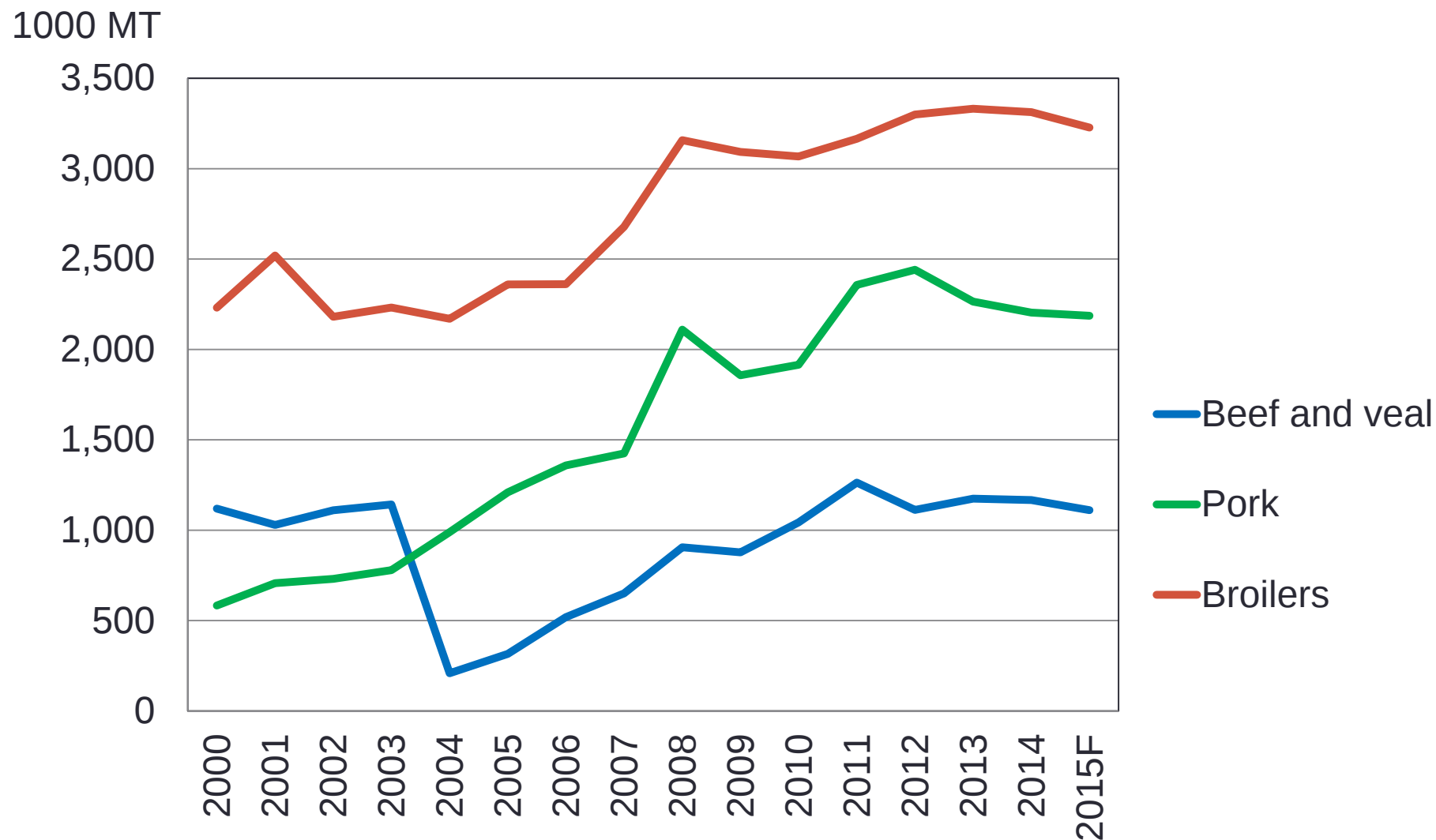


# Year-over-year declines in PEDv

## New PEDv Case Reports by Week

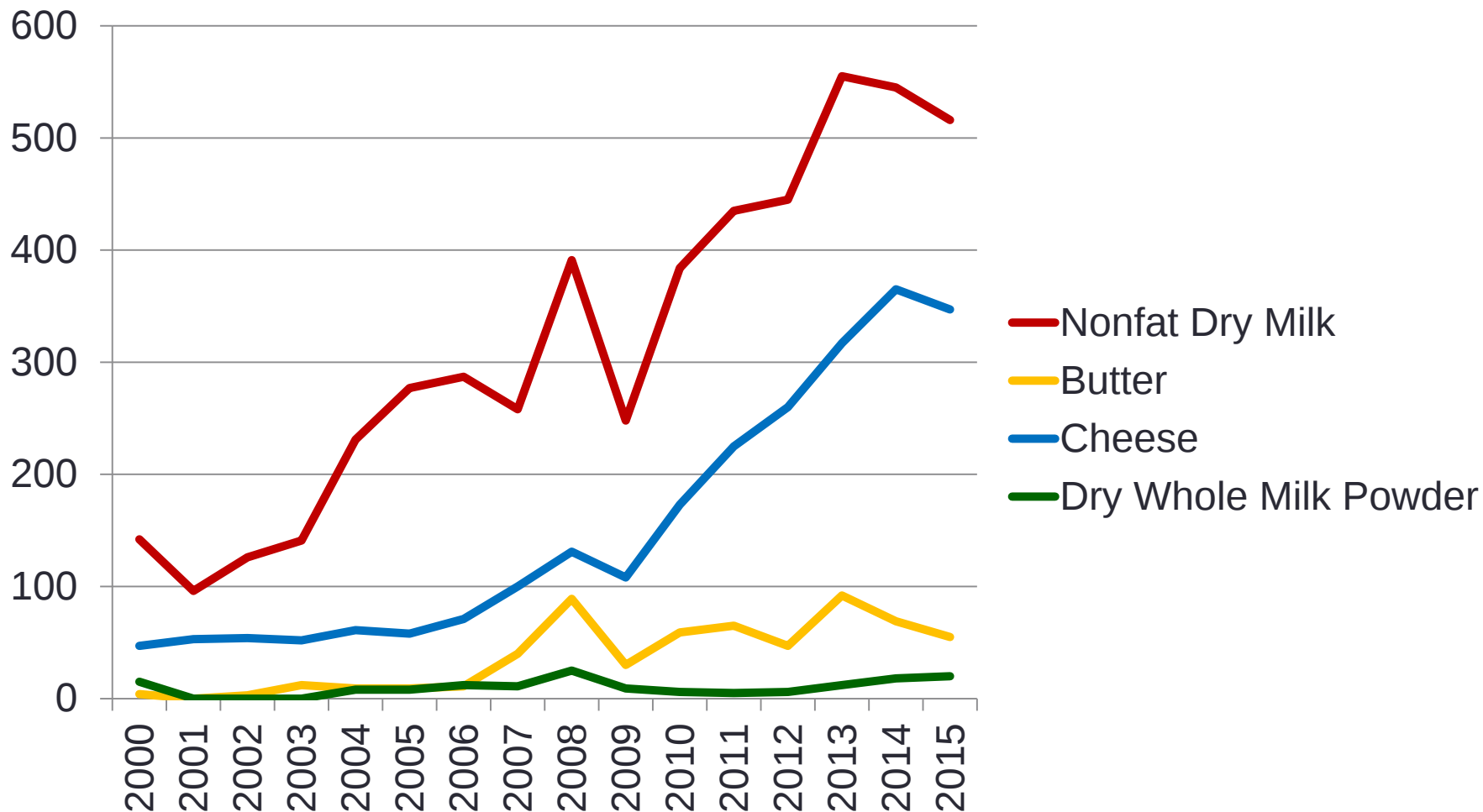


# Meat exports expected to remain high



# Dairy exports remain high, but down from 2014

1000 MT



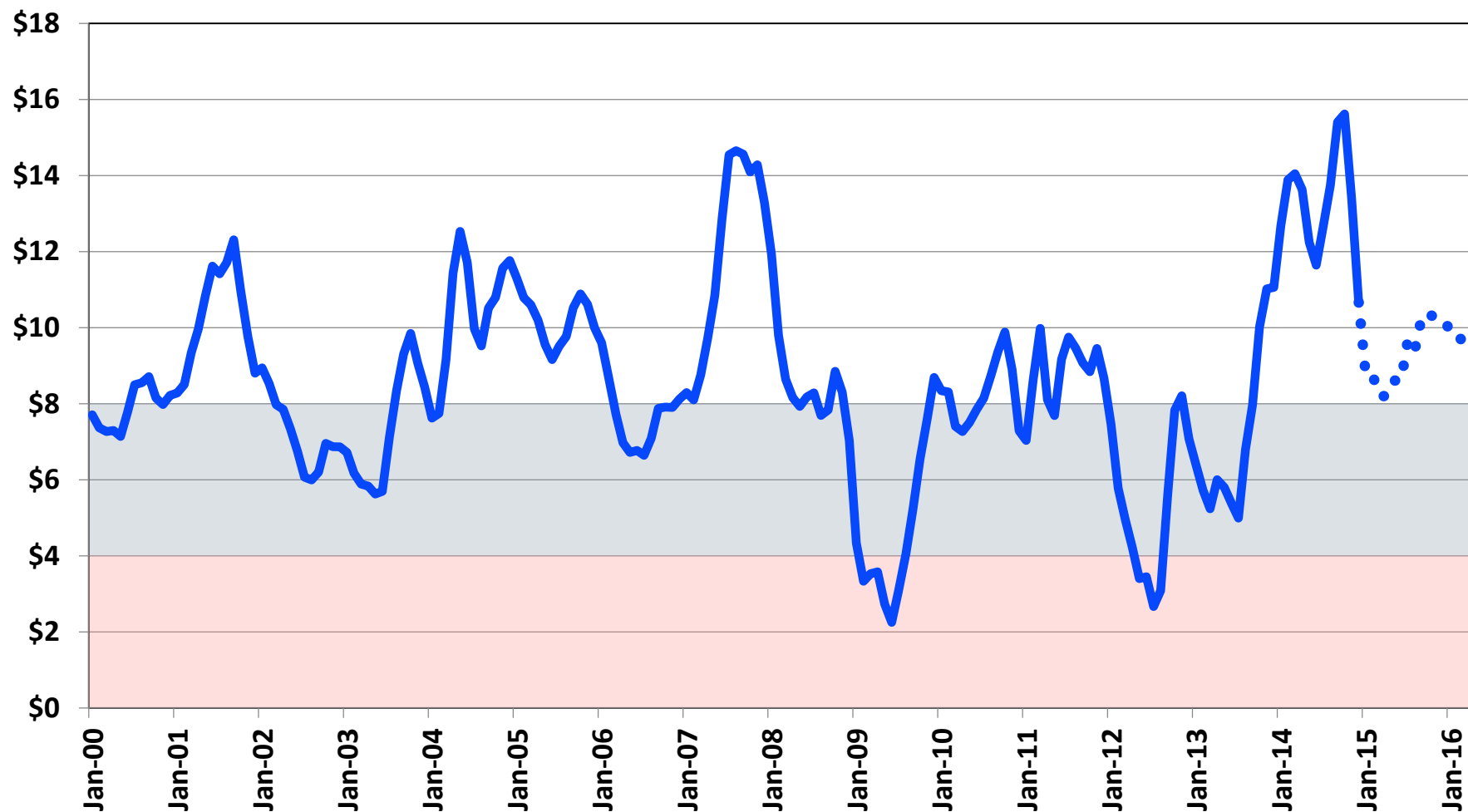
# Hog, dairy, and broiler prices expected to come down from 2014; cattle prices rise

| Animal products | 2010            | 2011   | 2012   | 2013   | 2014          | 2015F         | % Change 2015/14 |
|-----------------|-----------------|--------|--------|--------|---------------|---------------|------------------|
|                 | Dollars per cwt |        |        |        |               |               |                  |
| Steers          | 95.38           | 114.73 | 122.86 | 125.89 | 154.56        | <b>162.00</b> | 4.8%             |
| Hogs            | 55.06           | 66.11  | 60.88  | 64.05  | <b>76.03</b>  | 56.00         | -26.3%           |
| Broilers        | 83.10           | 79.90  | 86.60  | 99.70  | <b>104.90</b> | 100.30        | -4.4%            |
| Milk            | 16.26           | 20.14  | 18.52  | 20.05  | <b>23.98</b>  | 17.75         | -26.0%           |

Prices in red denote record levels.

# Dairy margins nearing \$8 per cwt

\$ per cwt



Source: NASS and AMS data for history, forecast from FSA Margin Protection Program Decision Tool, Feb 13, 2015

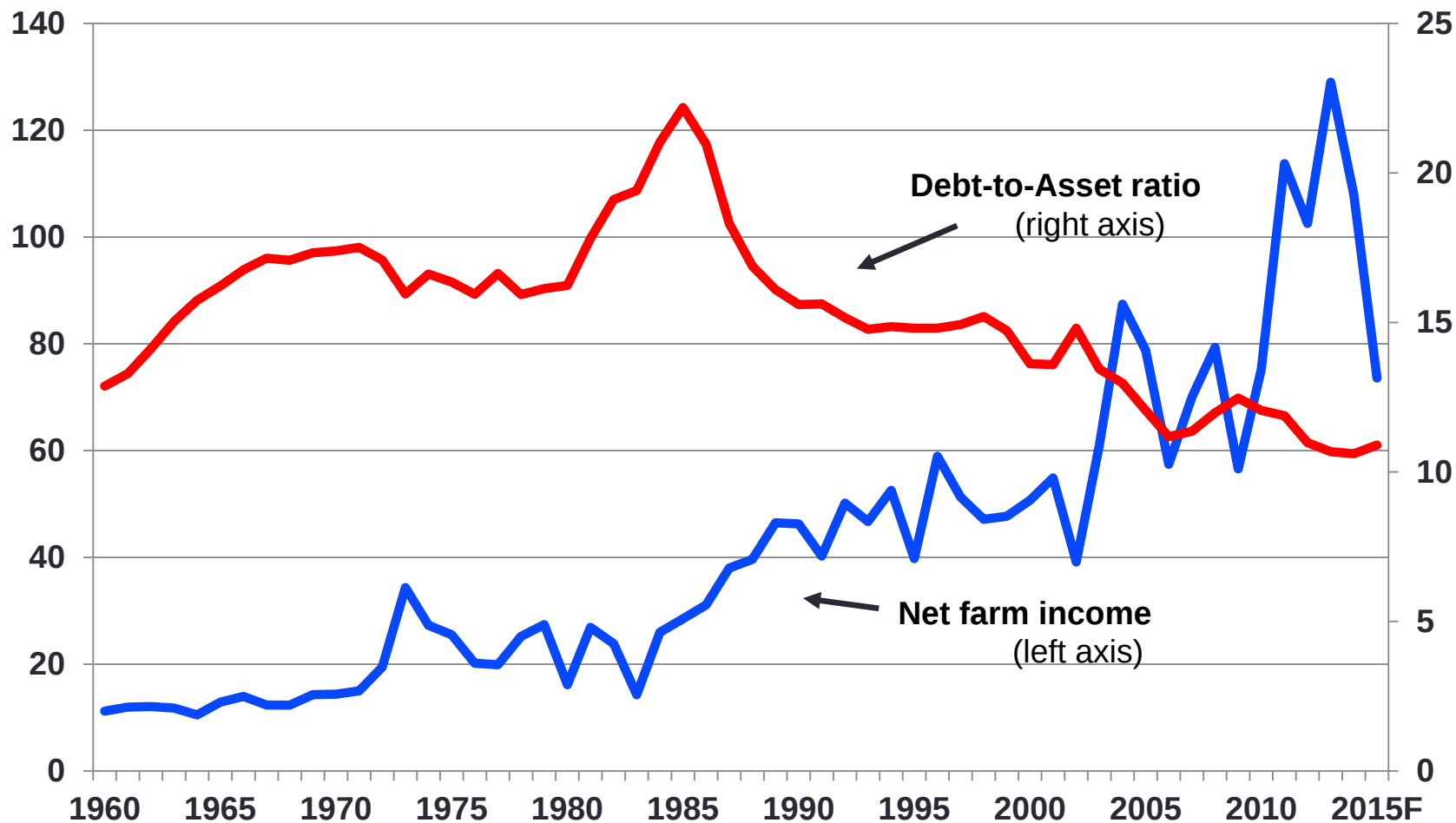
# Farm income and land values



# Net farm income is down, but debt-to-assets remain historically low

Billion dollars

Percent

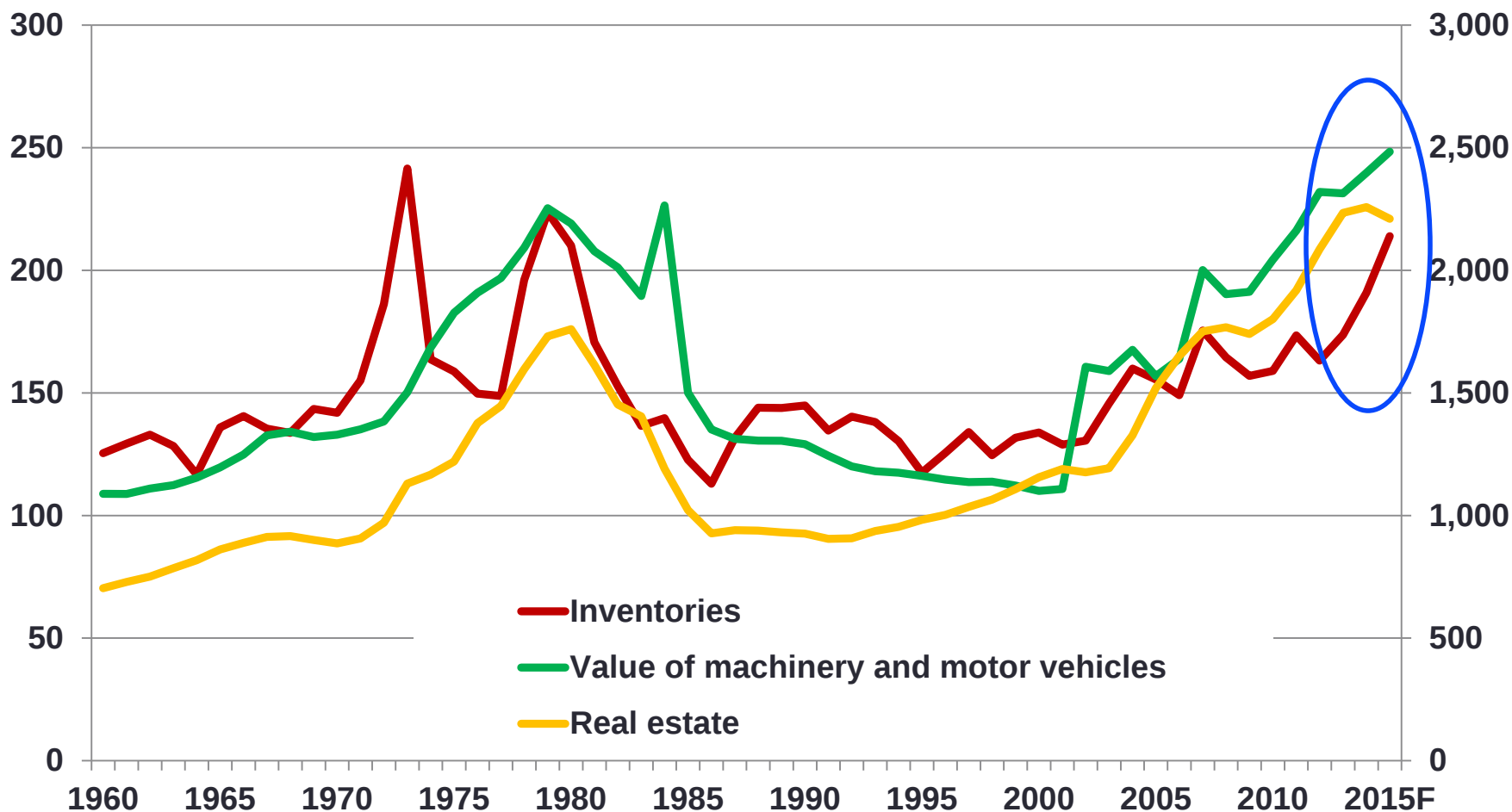


Data: USDA-ERS.

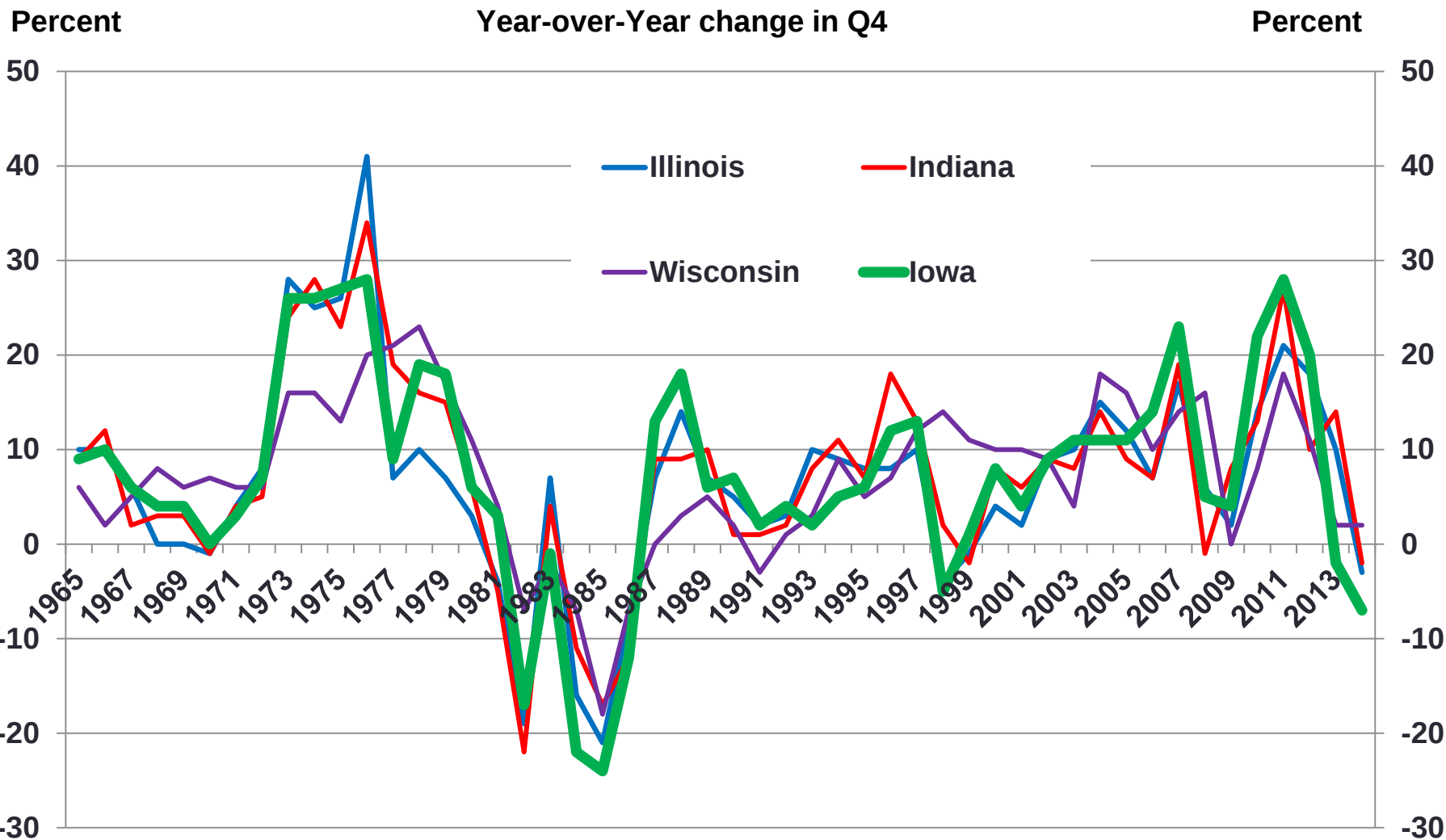
# High farm incomes in 2012-14 were used to purchase land, inventory, and machinery

Billion dollars (\$2009)

Billion dollars (\$2009)



# Farmland values coming down in some areas

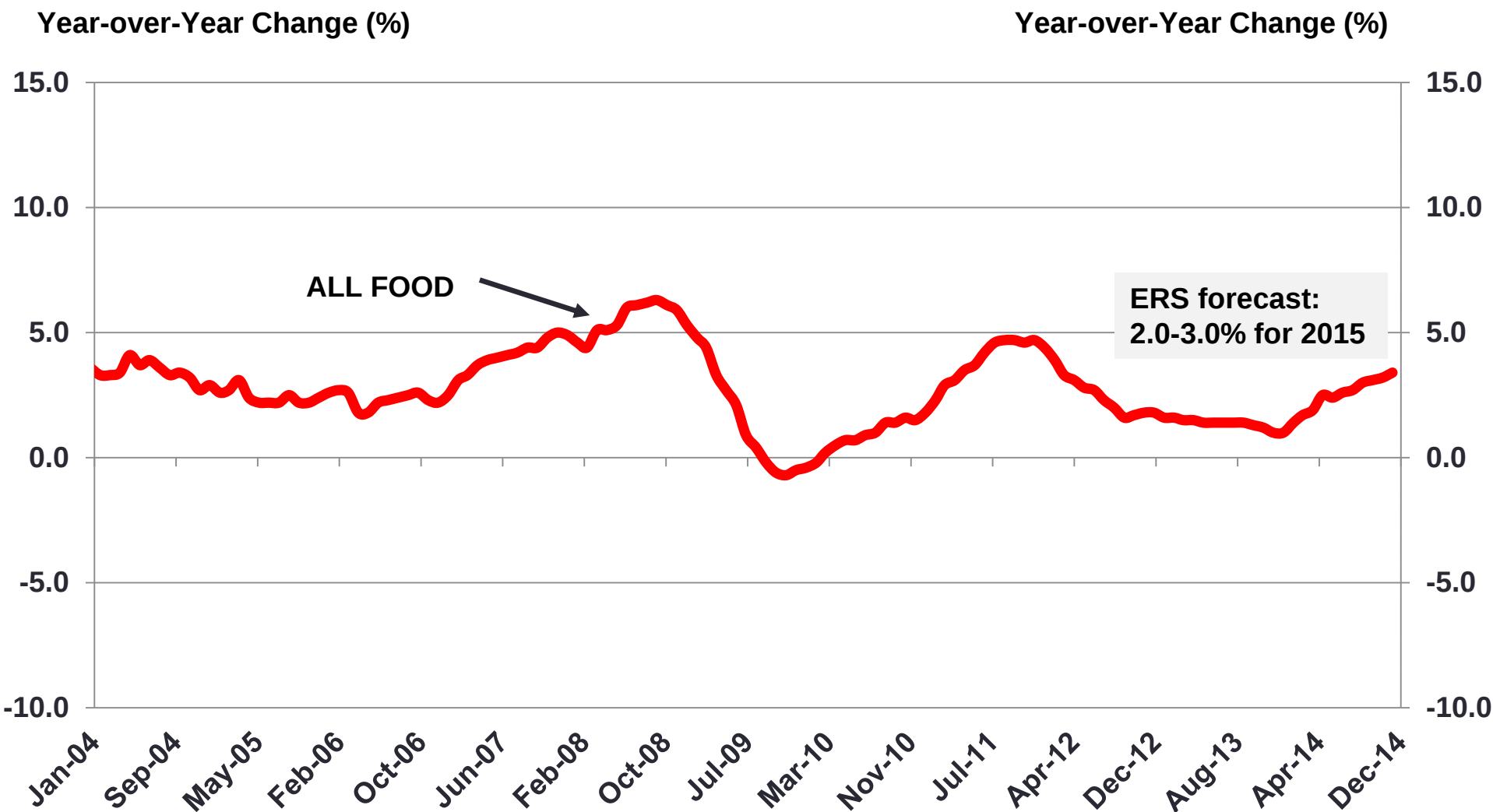


Data: Federal Reserve Bank Chicago.

# Outlook for Food Prices



# Food CPI remains low

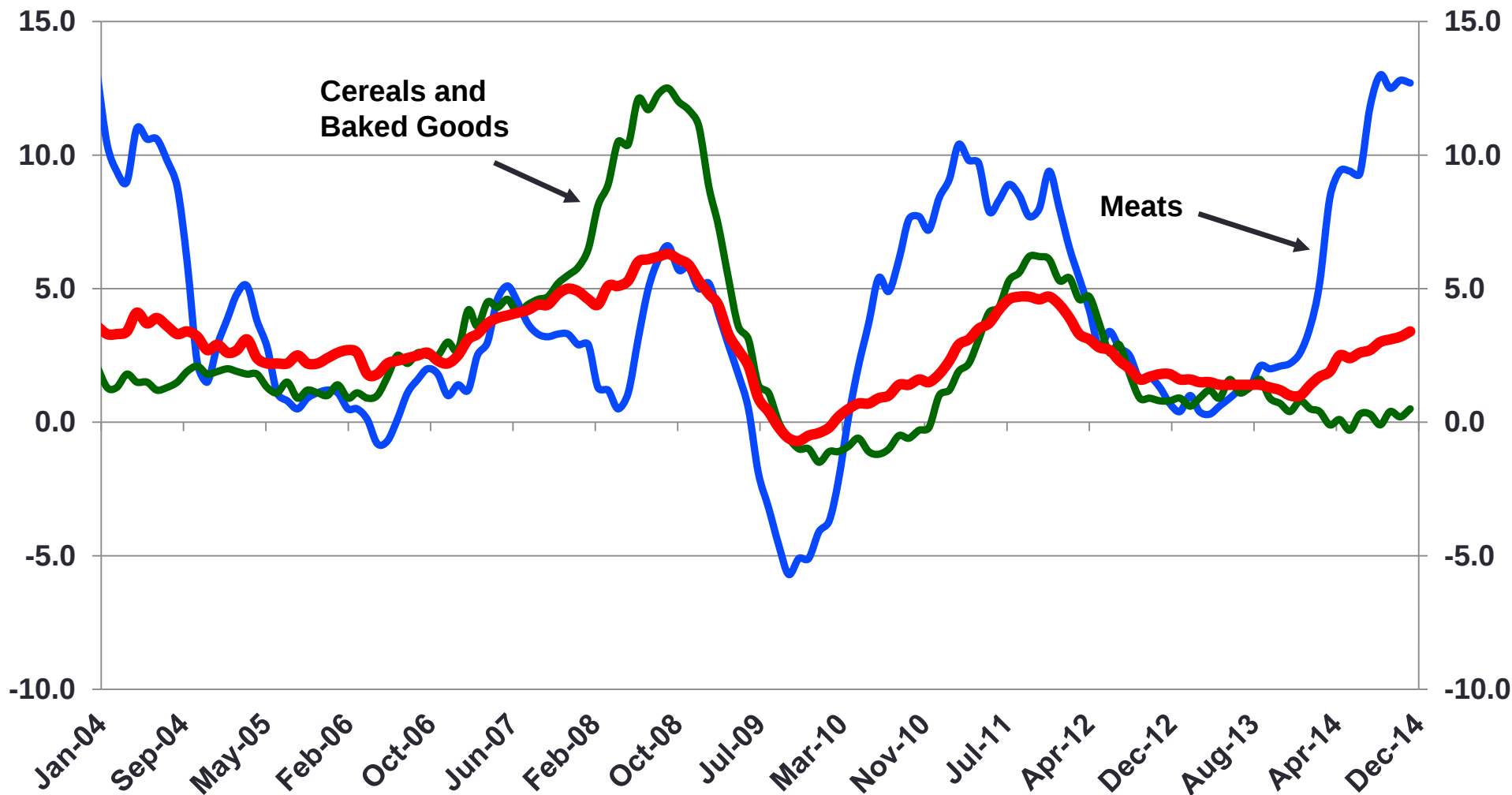


Source: BLS.

# Retail meat price inflation is above 10% y-o-y

Year-over-Year Change (%)

Year-over-Year Change (%)



Source: BLS.

# AGRICULTURAL OUTLOOK FORUM

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## Smart Agriculture in the 21st Century

A Discussion on Innovation,  
Bio-technology, and Big Data



February 19-20, 2015 —

Crystal Gateway Marriott Hotel, Arlington, Virginia