

# **Situation and Outlook**

## **Major Field Crops**

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# **Feed and Grain Summit**

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Chairperson  
World Agricultural Outlook Board  
Office of the Chief Economist  
U.S. Department of Agriculture

March 11, 2009  
**Harrisburg , Pennsylvania**

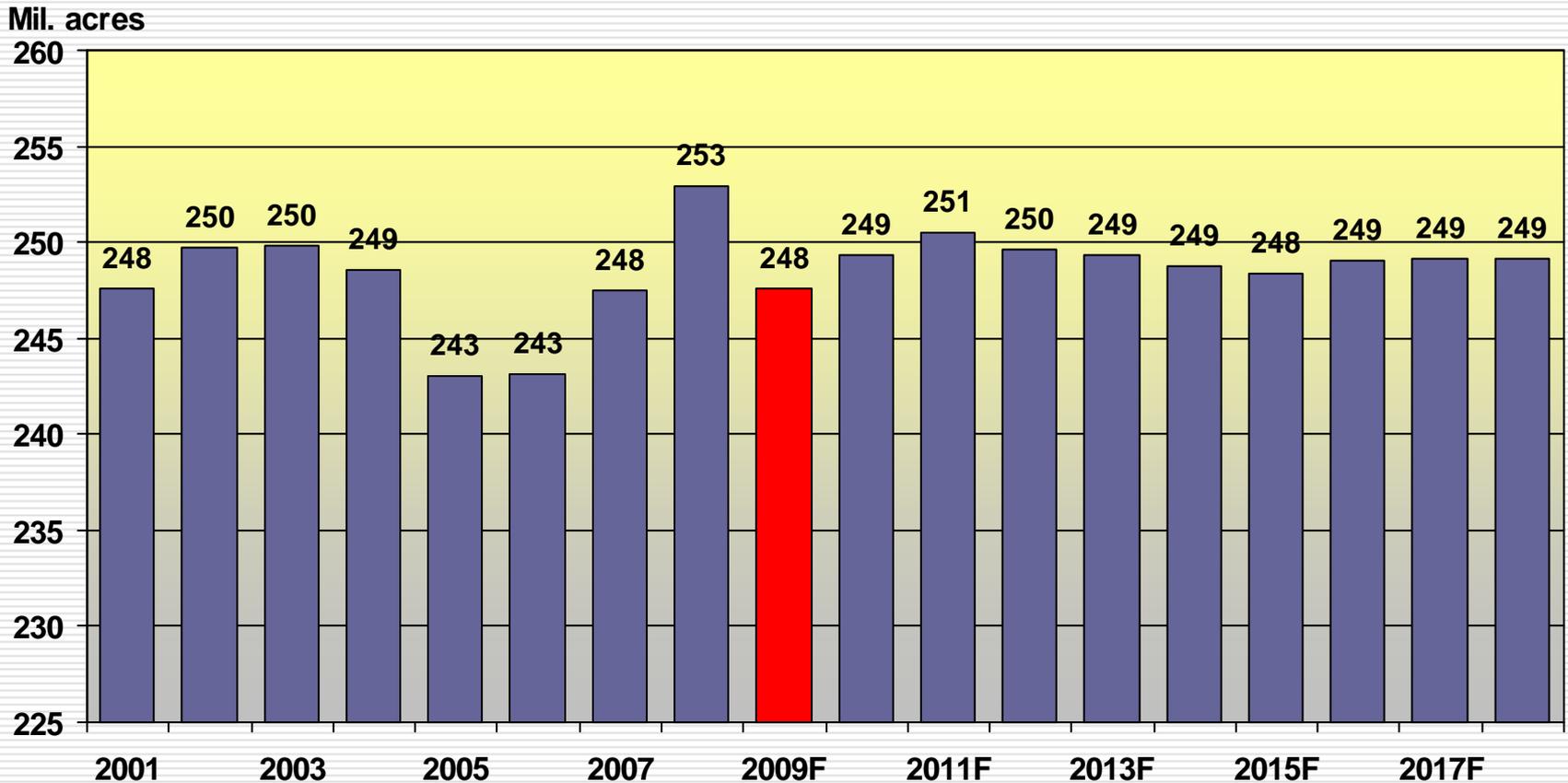
# Major Crop and CRP Acreage

(USDA Outlook Forum – Feb. 2009)

	2008/09	2009/10 F	% Change
	Million acres		
Corn	86.0	86.0	0.0
Soybeans	75.7	77.0	+1.7
Wheat	63.1	58.0	-8.1
All Cotton	9.5	8.5	-10.5
Rice	3.00	2.93	-2.3
5-crop total	237.1	232.4	-2.0
CRP acres	34.8	34.0	-2.3

Note: 2009 forecast from USDA's Agricultural Outlook Forum, Washington, D.C., February 27, 2009.

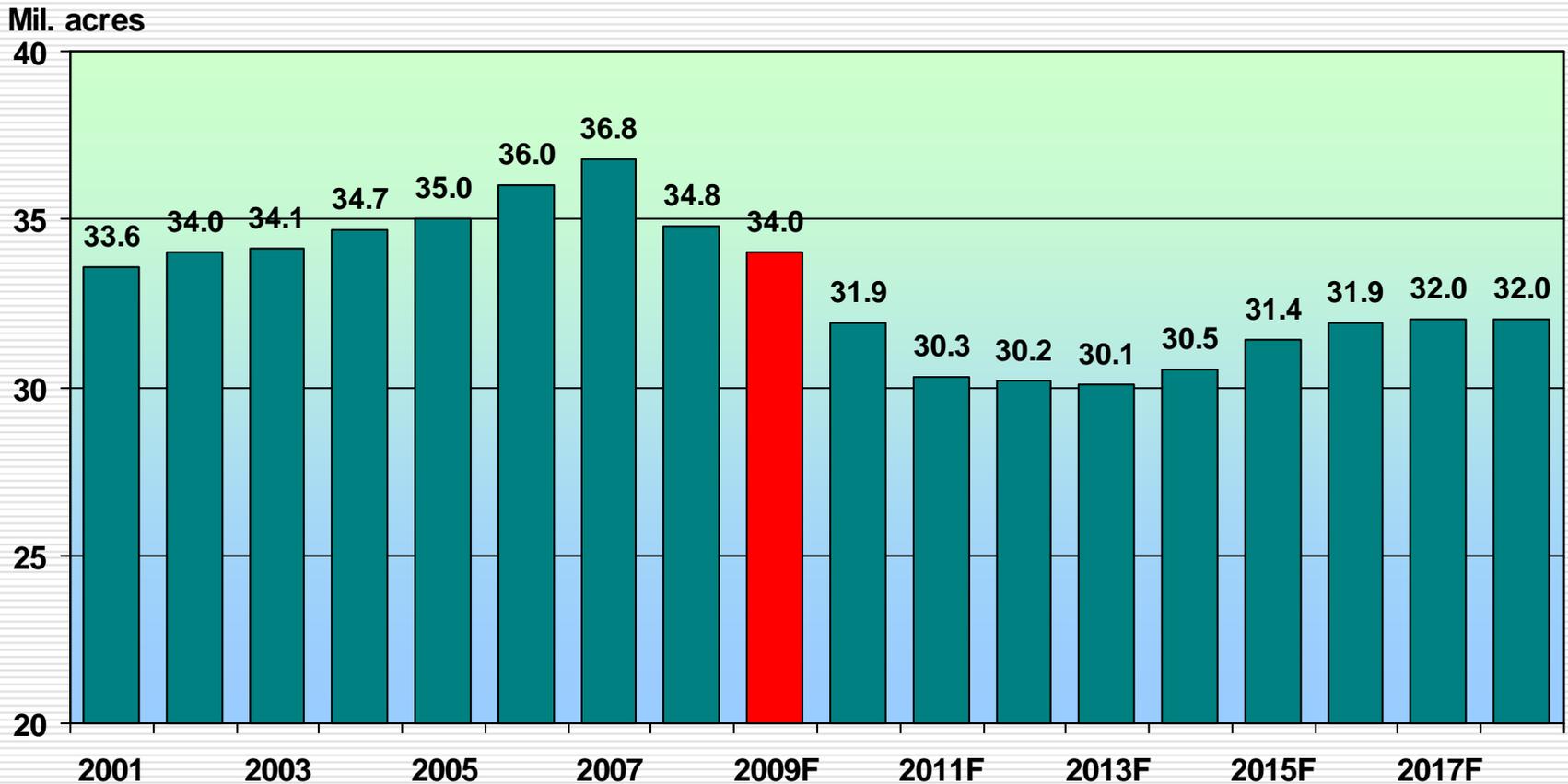
# Planted Area 8-major Crops\*



Note: 2009 planted area forecast from USDA's *Grains & Oilseeds Outlook*, Agricultural Outlook Forum, Washington, D.C., February 27, 2009. Projections for 2010-2018 are from *USDA Agricultural Projections to 2018*, February 2009.

\* The 8-major crops include wheat, corn, sorghum, barley, oats, soybeans, upland cotton, and rice.

# Conservation Reserve Program Area



Source: *USDA Agricultural Projections to 2018*, February 2009.

# U.S. Wheat Supply and Demand

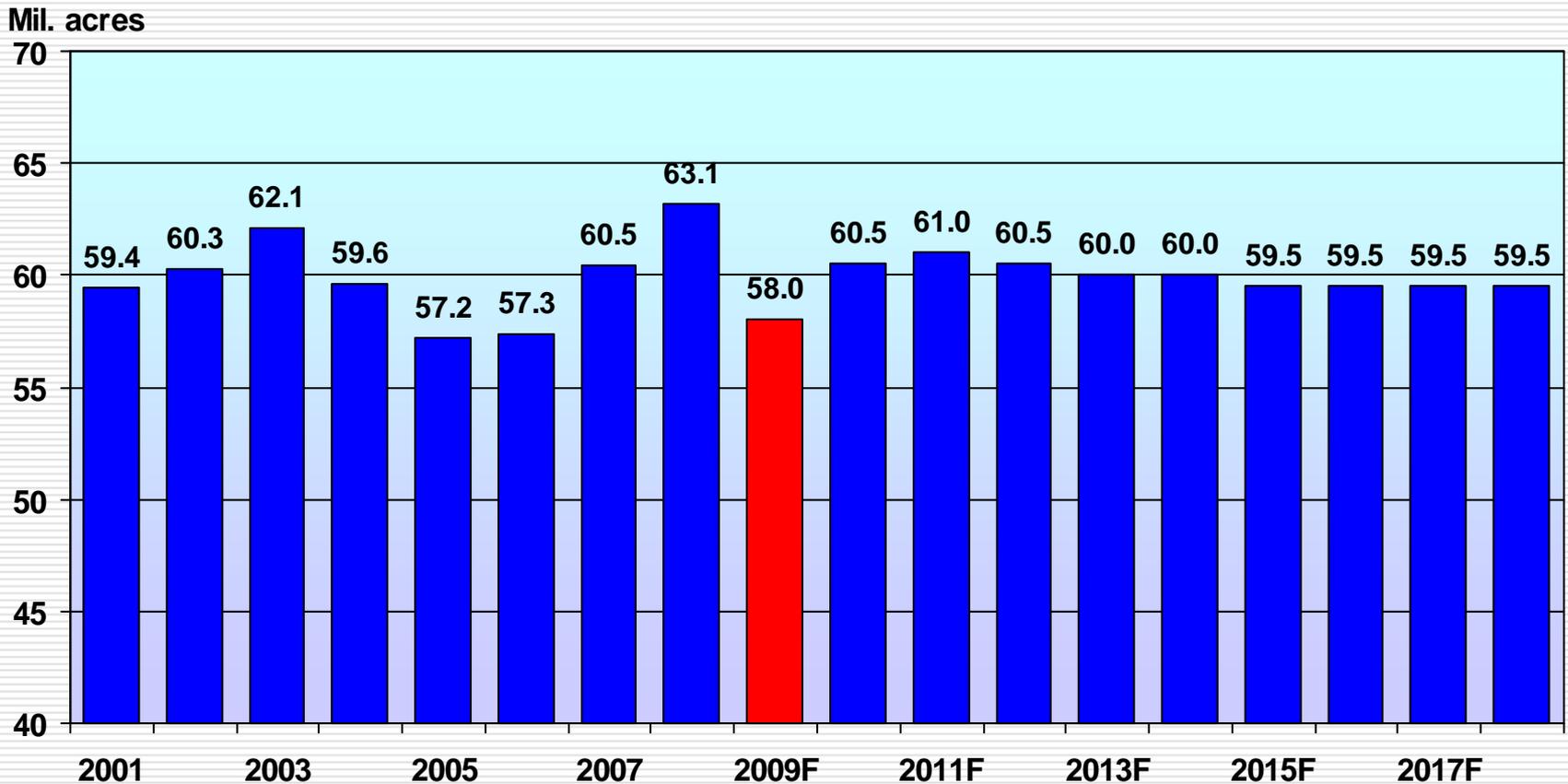
	2007/08 estimate	2008/09 forecast	2009/10 forecast	Change from 2008/09 Percent
<b>Planted area (million acres)</b>	<b>60.5</b>	<b>63.1</b>	<b>58.0</b>	<b>-8.2</b>
<b>Harvested area (million acres)</b>	<b>51.0</b>	<b>55.7</b>	<b>49.3</b>	<b>-11.5</b>
<b>Yield (bushels per acre)</b>	<b>40.2</b>	<b>44.9</b>	<b>43.0</b>	<b>-4.2</b>
	<i>Million bushels</i>			
<b>Beginning stocks</b>	<b>456</b>	<b>306</b>	<b>655</b>	<b>114.2</b>
<b>Production</b>	<b>2,051</b>	<b>2,500</b>	<b>2,120</b>	<b>-15.2</b>
<b>Imports</b>	<b>113</b>	<b>120</b>	<b>105</b>	<b>-12.5</b>
<b>Total supply</b>	<b>2,620</b>	<b>2,925</b>	<b>2,880</b>	<b>-1.5</b>
<b>Food use</b>	<b>947</b>	<b>925</b>	<b>955</b>	<b>3.2</b>
<b>Seed</b>	<b>88</b>	<b>78</b>	<b>81</b>	<b>3.8</b>
<b>Feed and residual</b>	<b>15</b>	<b>230</b>	<b>230</b>	<b>0.0</b>
<b>Domestic use</b>	<b>1,050</b>	<b>1,233</b>	<b>1,266</b>	<b>2.7</b>
<b>Exports</b>	<b>1,264</b>	<b>980</b>	<b>950</b>	<b>-3.1</b>
<b>Total use</b>	<b>2,314</b>	<b>2,213</b>	<b>2,216</b>	<b>0.1</b>
<b>Ending stocks</b>	<b>306</b>	<b>712</b>	<b>664</b>	<b>-6.8</b>
	<i>Percent</i>			
<b>Stocks to use ratio</b>	<b>13.2</b>	<b>32.2</b>	<b>32.2</b>	
	<i>Dollars per bushel</i>			
<b>Average market price</b>	<b>6.48</b>	<b>6.80</b>	<b>5.15</b>	<b>-24.3</b>

Note: 2009/10 forecast from USDA's Agricultural Outlook Forum, Washington, D.C., February 27, 2009; estimates for 2007/08 and forecasts for 2008/09 from *World Agricultural Supply and Demand Estimates*, March 11, 2009.

# World Wheat Production

Country or Region	2007/08 estimate	2008/09 forecast	Change from 2007/08
	<i>Million Tons</i>		<i>Percent</i>
World	611.0	684.4	<b>12.0</b>
United States	55.8	68.0	<b>21.9</b>
Foreign	555.2	616.4	<b>11.0</b>
Argentina	16.3	8.4	<b>-48.5</b>
Canada	20.1	28.6	<b>42.7</b>
Australia	13.8	21.5	<b>55.4</b>
European Union	119.4	150.3	<b>25.8</b>
Russian Federation	49.4	63.7	<b>28.9</b>
Ukraine	13.9	25.9	<b>86.3</b>
China	109.3	113.0	<b>3.4</b>
India	75.8	78.6	<b>3.7</b>

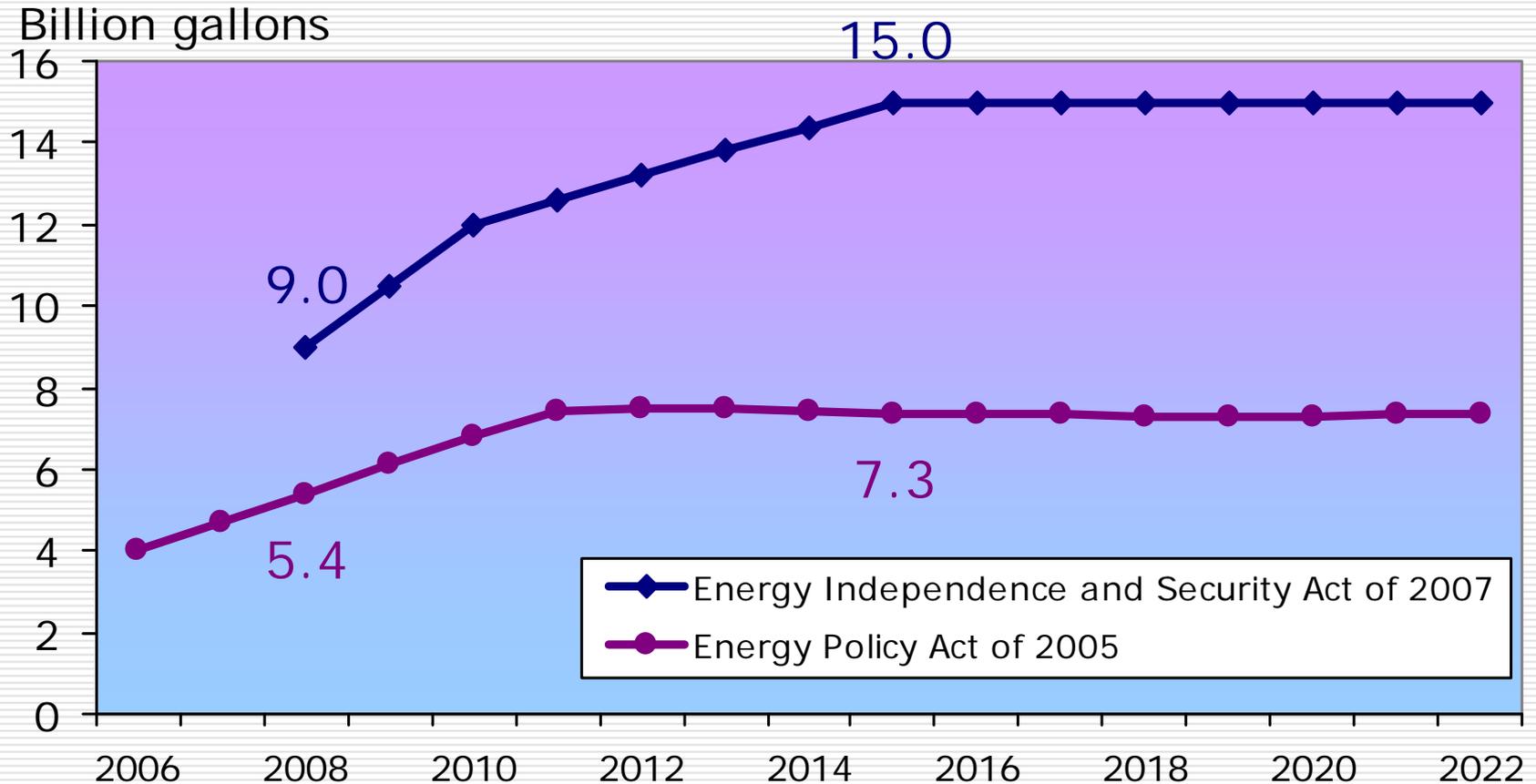
# U.S. Wheat Planted Area Trend



Note: 2009 planted area forecast from USDA's *Grains & Oilseeds Outlook*, Agricultural Outlook Forum, Washington, D.C., February 27, 2009. Projections for 2010-2018 are from *USDA Agricultural Projections to 2018*, February 2009.

# Renewable Fuel Standards (RFS)

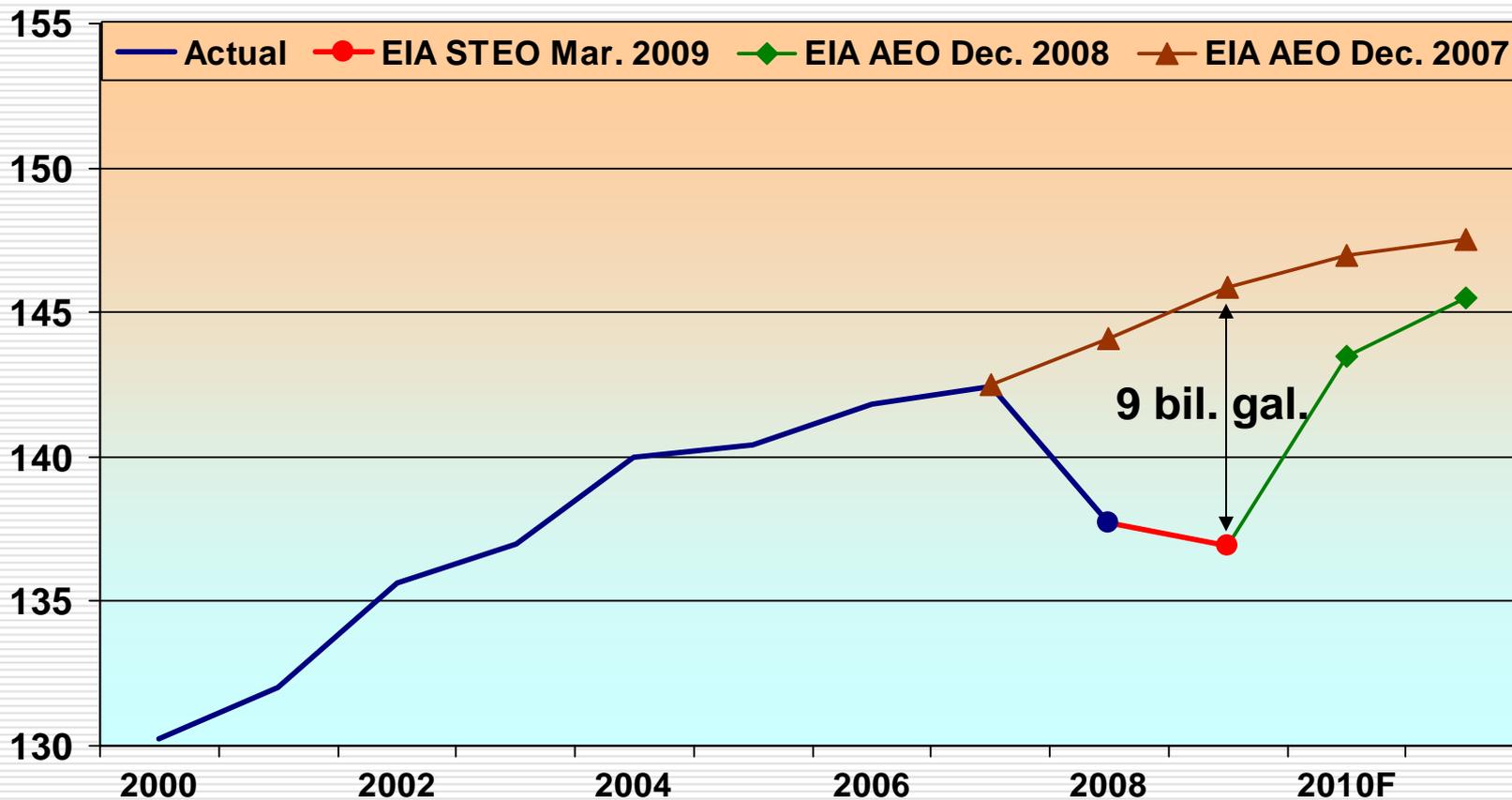
Corn starch based ethanol, 2006 through 2022



Note: RFS levels under the Energy Policy Act of 2005 are projected for 2013 and beyond based on the act's provisions and growth in motor gasoline consumption projected by the Energy Information Administration in *Annual Energy Outlook 2009*.

# U.S. Blended Motor Gasoline Consumption

Bil. gallons

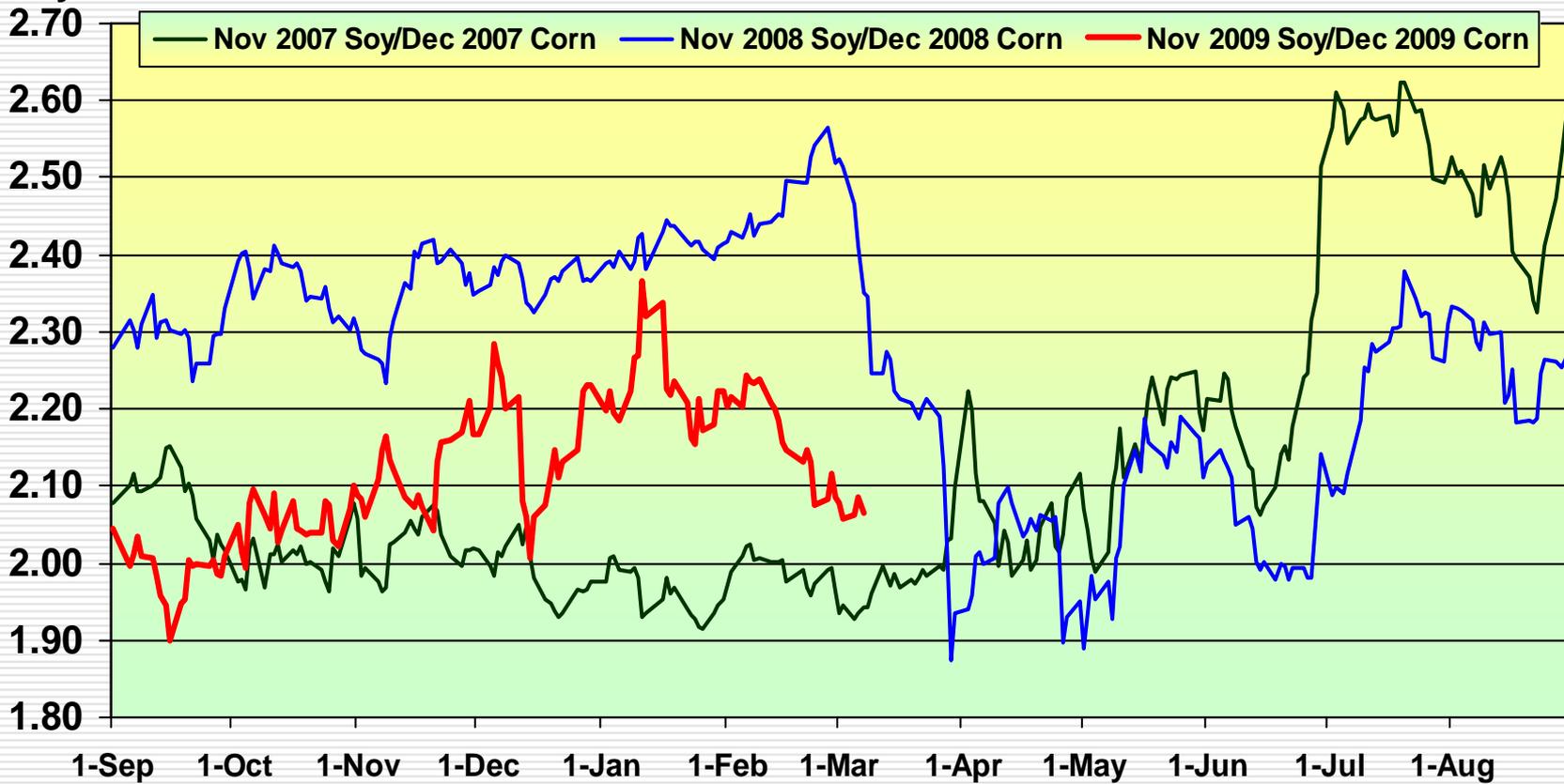


Source: DOE-Energy Information Administration, Short-term Energy Outlook (STEO) and Annual Energy Outlook (AEO).

# New-crop Soybean/Corn Price Ratios

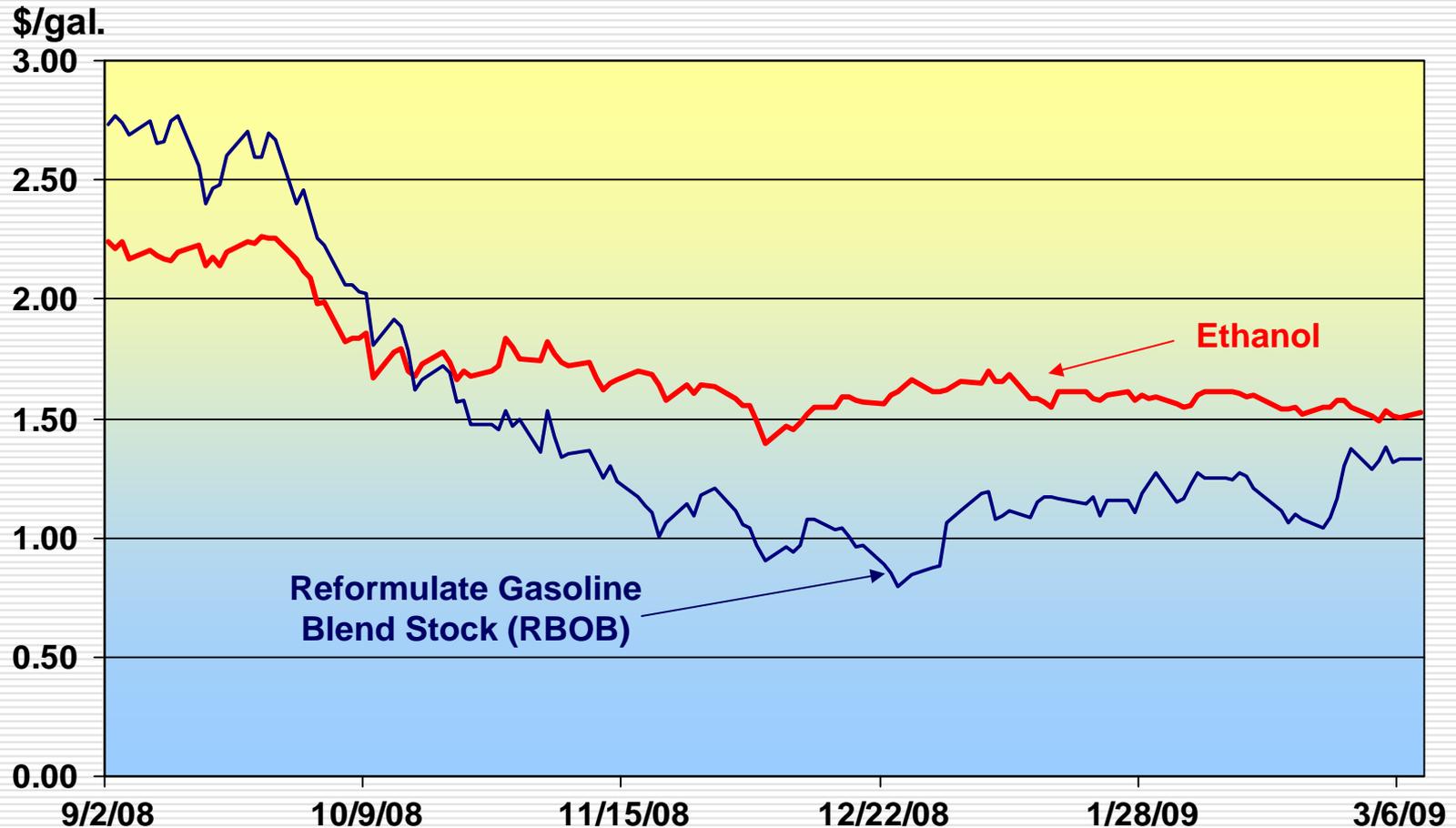
2007-crop, 2008-crop, & 2009-crop thru Mar. 9, 2009

## Soybean/corn



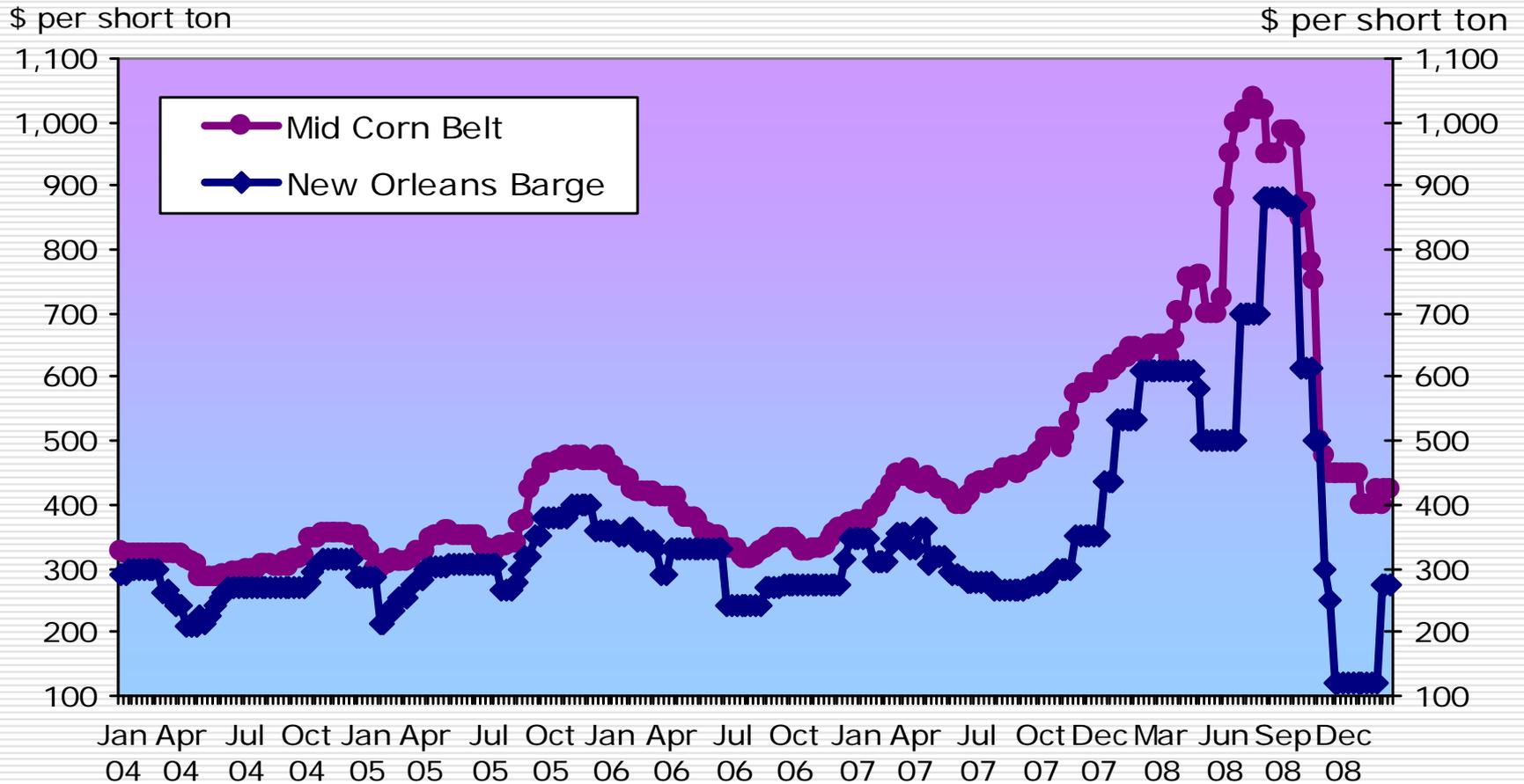
Note: Chicago Board of Trade daily settlement prices.

# Ethanol and RBOB Nearby Futures Prices



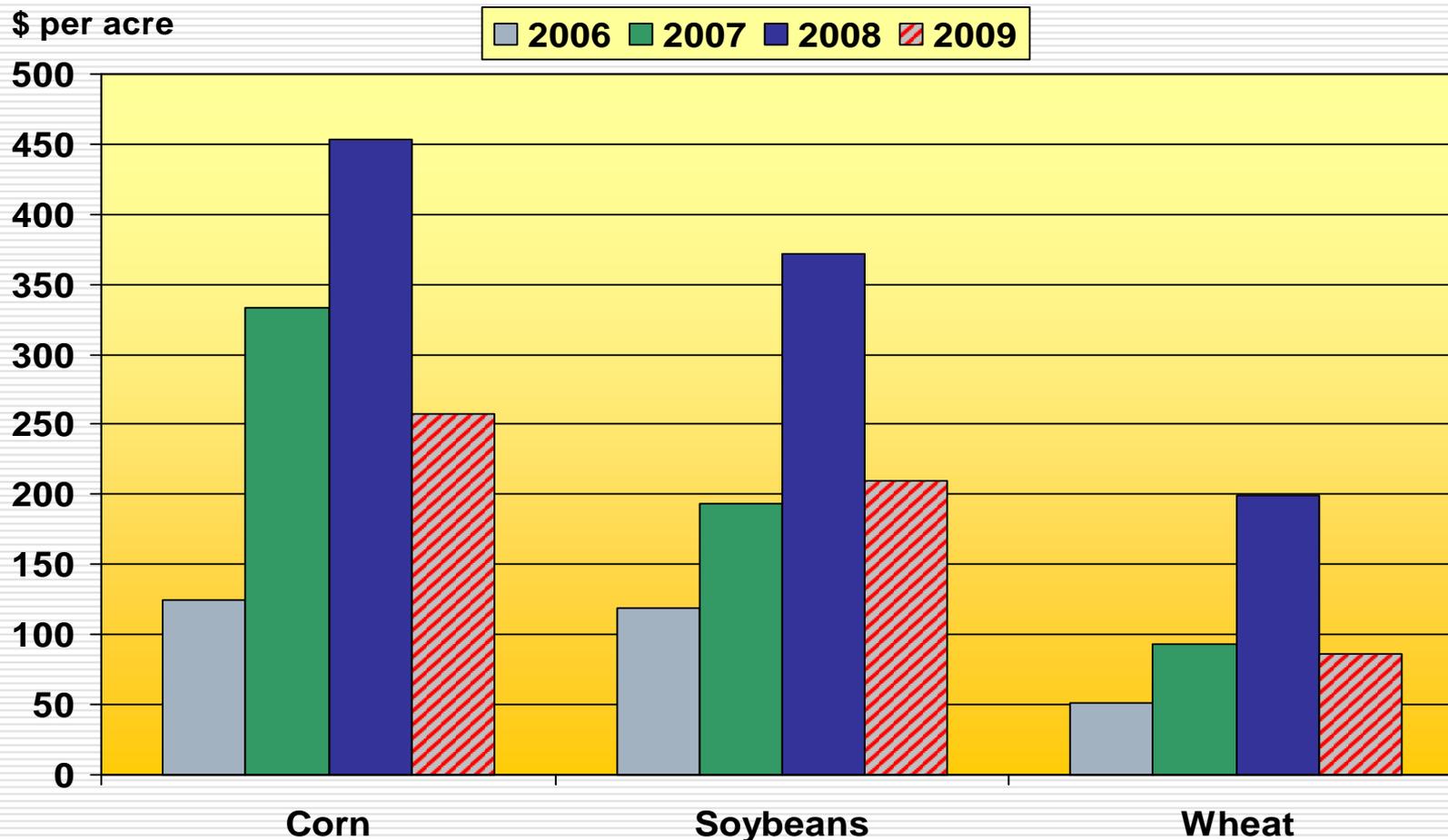
Note: Ethanol prices based on CBOT nearby futures. RBOB (Reformulated Gasoline Blend Stock) based on NYME nearby futures.

# U.S. Ammonia Prices, weekly



Source: Green Markets Fertilizer Market Intelligence Weekly

# Early Spring Net Returns Outlook



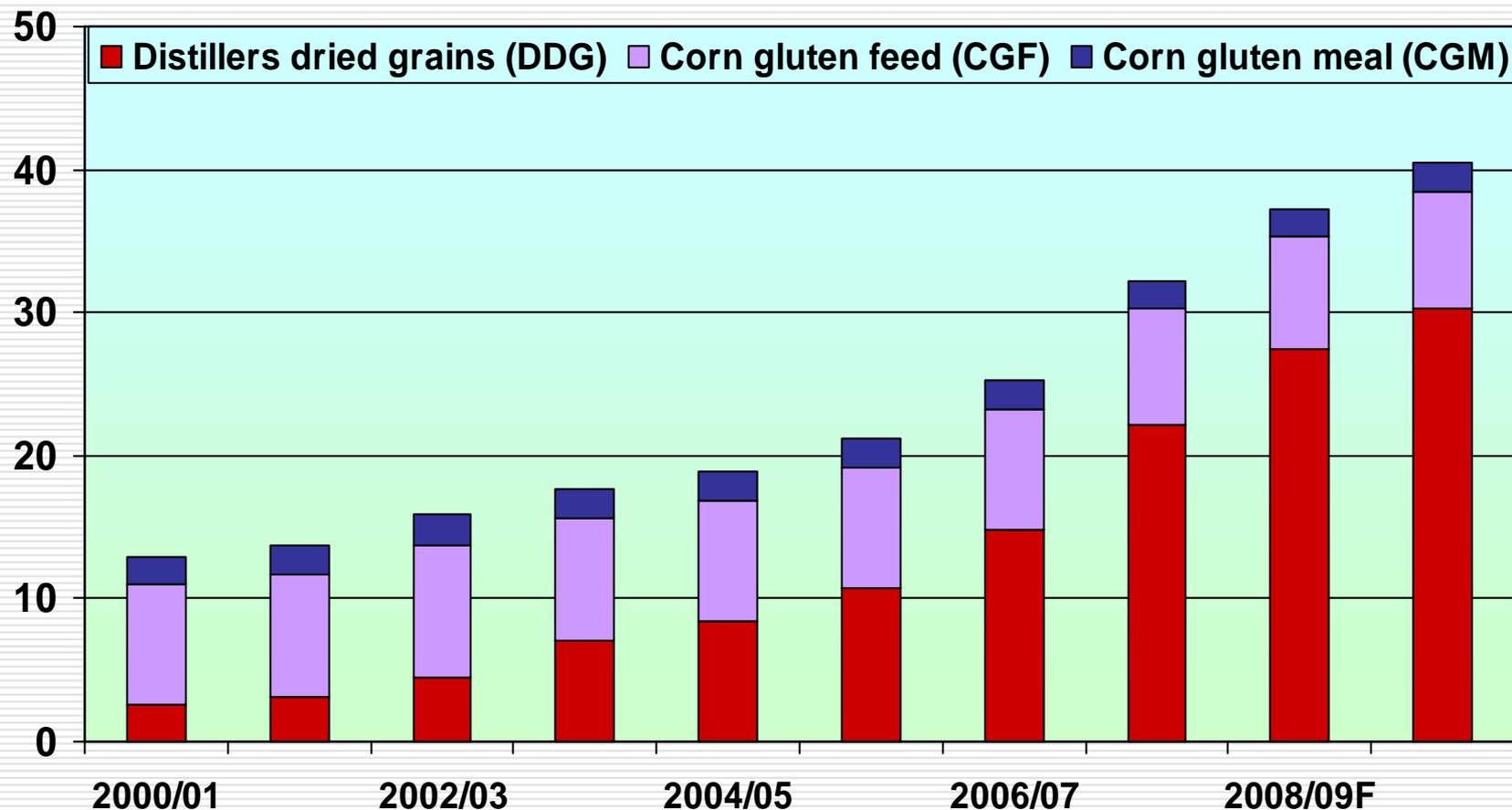
Note: Net returns are above variable costs and reflect trend yields and USDA price and production cost forecasts as of February each year. Projections for 2009 are from USDA's *Grains & Oilseeds Outlook*, Agricultural Outlook Forum, Washington, D.C., February 27, 2009.

# U.S. Corn Supply and Demand

	2007/08 estimate	2008/09 forecast	2009/10 forecast	Change from 2008/09
				<i>Percent</i>
<b>Planted area (million acres)</b>	<b>93.5</b>	<b>86.0</b>	<b>86.0</b>	<b>0.0</b>
<b>Harvested area (million acres)</b>	<b>86.5</b>	<b>78.6</b>	<b>78.8</b>	<b>0.2</b>
<b>Yield (bushels per acre)</b>	<b>150.7</b>	<b>153.9</b>	<b>156.9</b>	<b>1.9</b>
				<i>Million bushels</i>
<b>Beginning stocks</b>	<b>1,304</b>	<b>1,624</b>	<b>1,790</b>	<b>10.2</b>
<b>Production</b>	<b>13,038</b>	<b>12,101</b>	<b>12,365</b>	<b>2.2</b>
<b>Total supply</b>	<b>14,362</b>	<b>13,740</b>	<b>14,170</b>	<b>3.1</b>
<b>Feed and residual</b>	<b>5,938</b>	<b>5,300</b>	<b>5,200</b>	<b>-1.9</b>
<b>Food, seed, and industrial</b>	<b>4,363</b>	<b>5,000</b>	<b>5,400</b>	<b>8.0</b>
<b>Ethanol</b>	<b>3,026</b>	<b>3,700</b>	<b>4,100</b>	<b>10.8</b>
<b>Domestic use</b>	<b>10,302</b>	<b>10,300</b>	<b>10,600</b>	<b>2.9</b>
<b>Exports</b>	<b>2,436</b>	<b>1,700</b>	<b>1,850</b>	<b>8.8</b>
<b>Total use</b>	<b>12,737</b>	<b>12,000</b>	<b>12,450</b>	<b>3.8</b>
<b>Ending stocks</b>	<b>1,624</b>	<b>1,740</b>	<b>1,720</b>	<b>-1.2</b>
				<i>Percent</i>
<b>Stocks/use</b>	<b>12.8</b>	<b>14.5</b>	<b>13.8</b>	
				<i>Dollars/bushel</i>
<b>Average market price</b>	<b>4.20</b>	<b>4.10</b>	<b>3.60</b>	<b>-12.2</b>

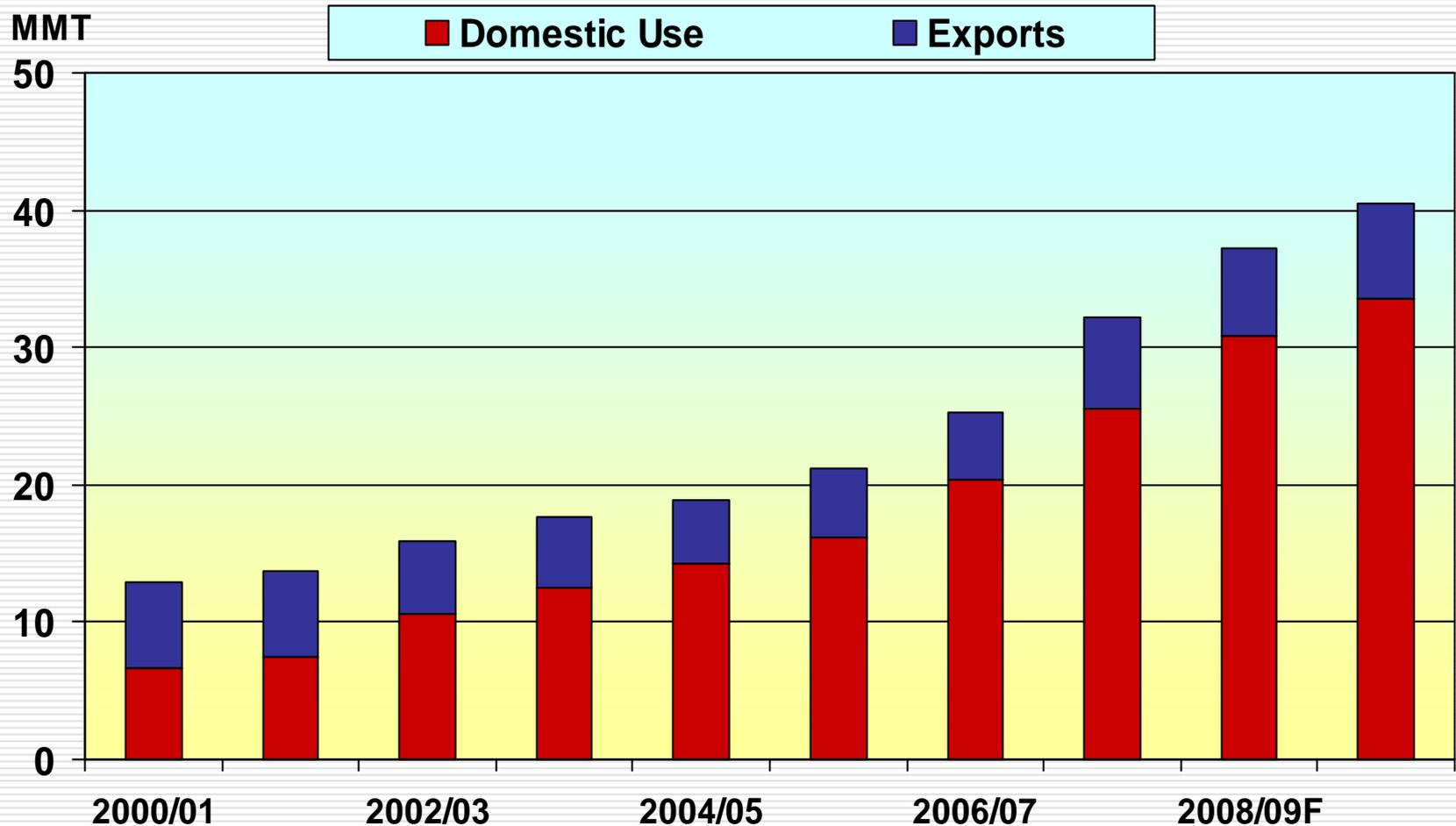
# Corn-based Feed Co-product Production

MMT



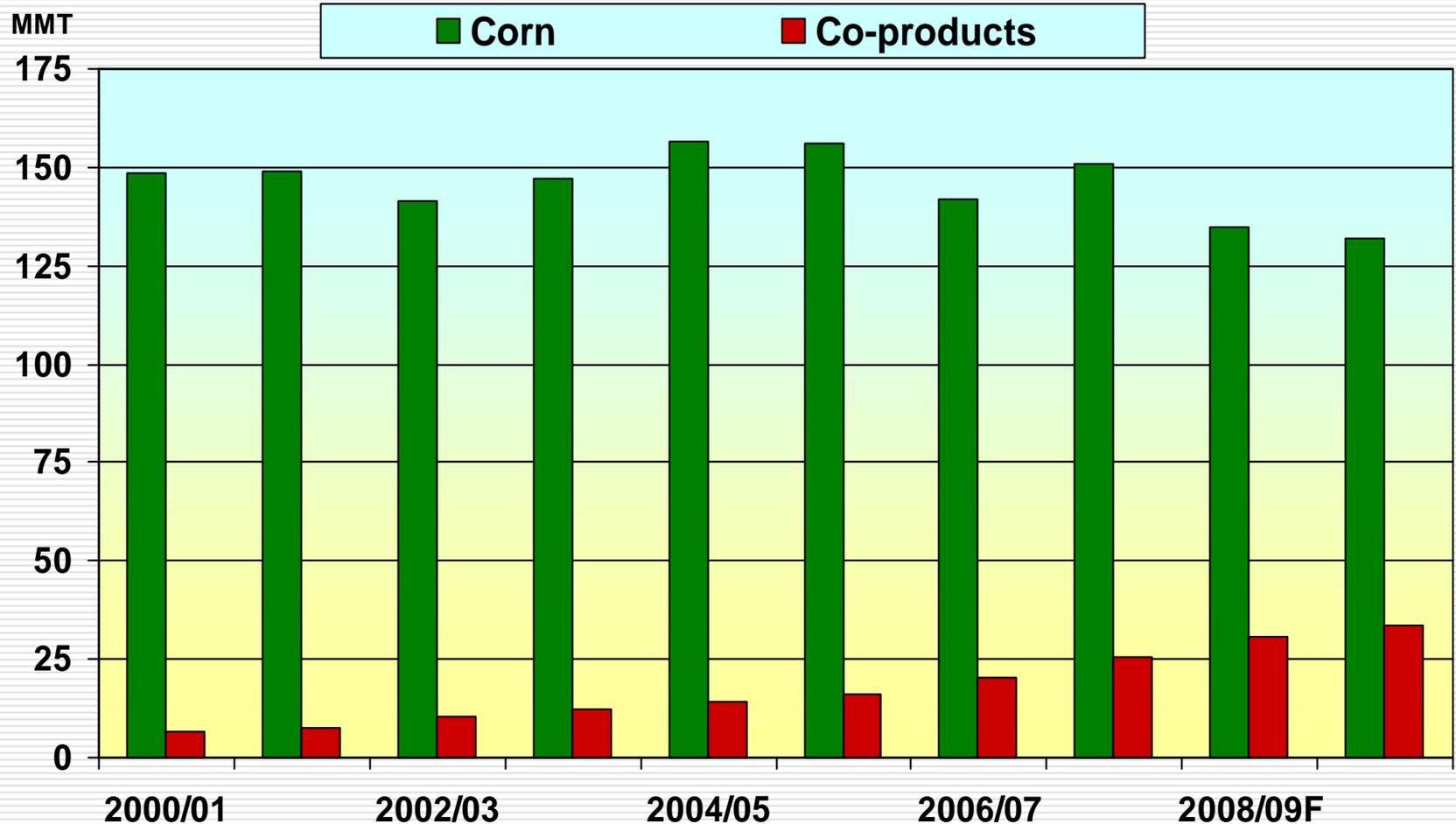
Note: Based on USDA food, seed, and industrial use estimates and projections.

# Corn-based Feed Co-product Use



Note: Based on USDA production and export estimates and projections.

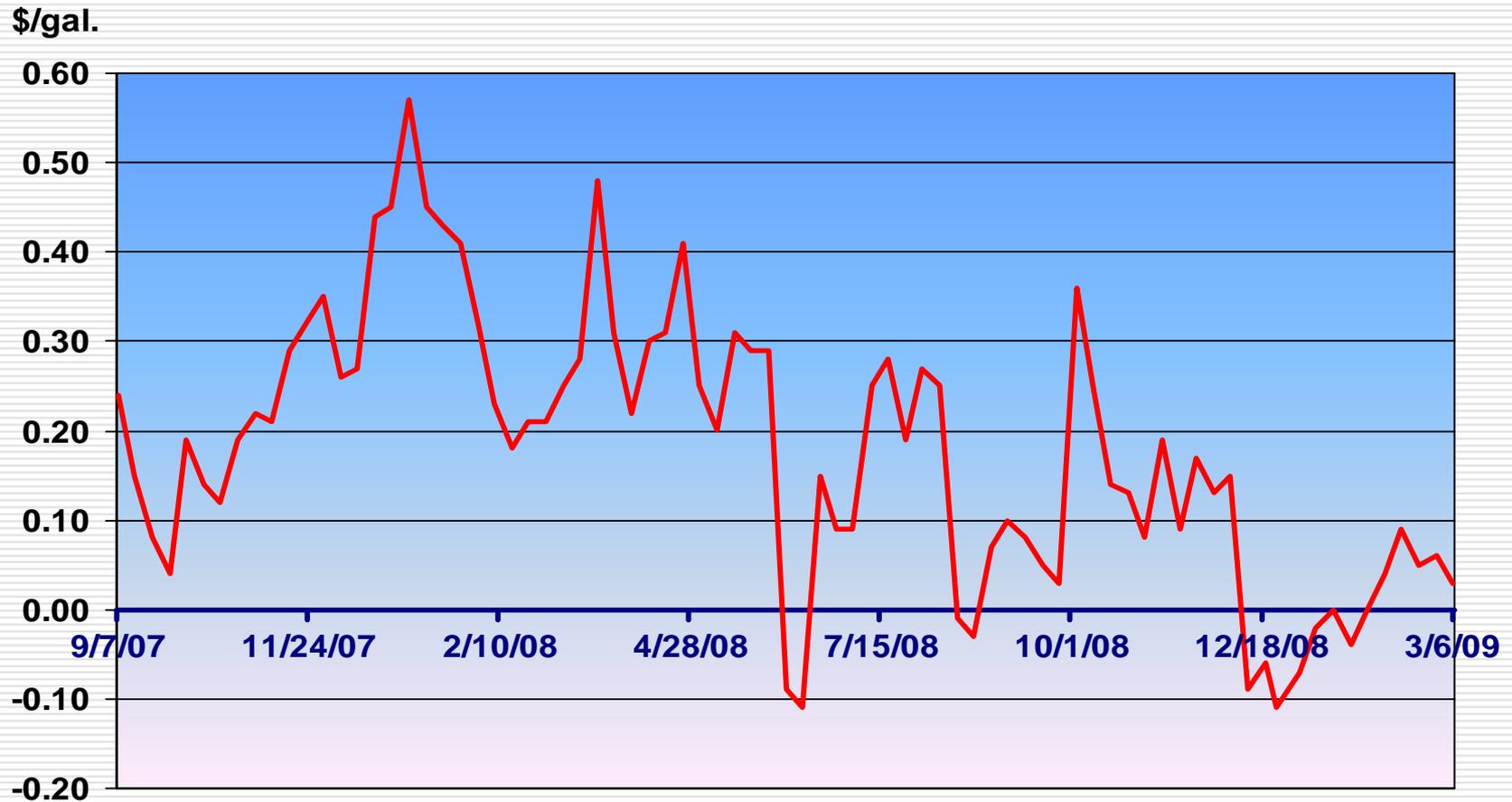
# Domestic Corn and Co-product Feeding



Note: Based on USDA estimates and projections.

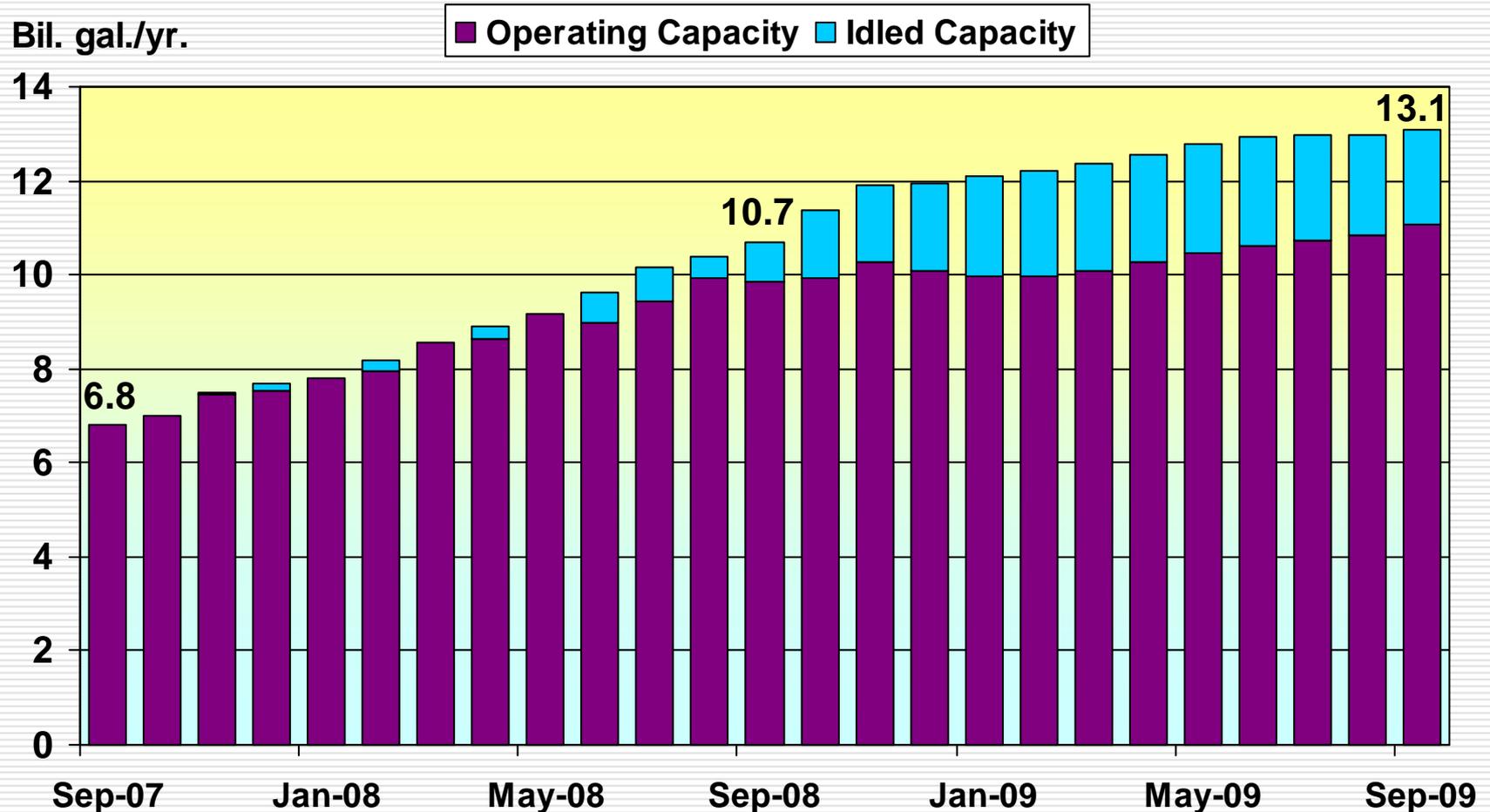
# Ethanol Producer Net Returns

Above Variable Costs



Note: USDA-WAOB estimates based on USDA-AMS plant reports and DOE-EIA estimates and forecasts for natural gas and electricity prices.

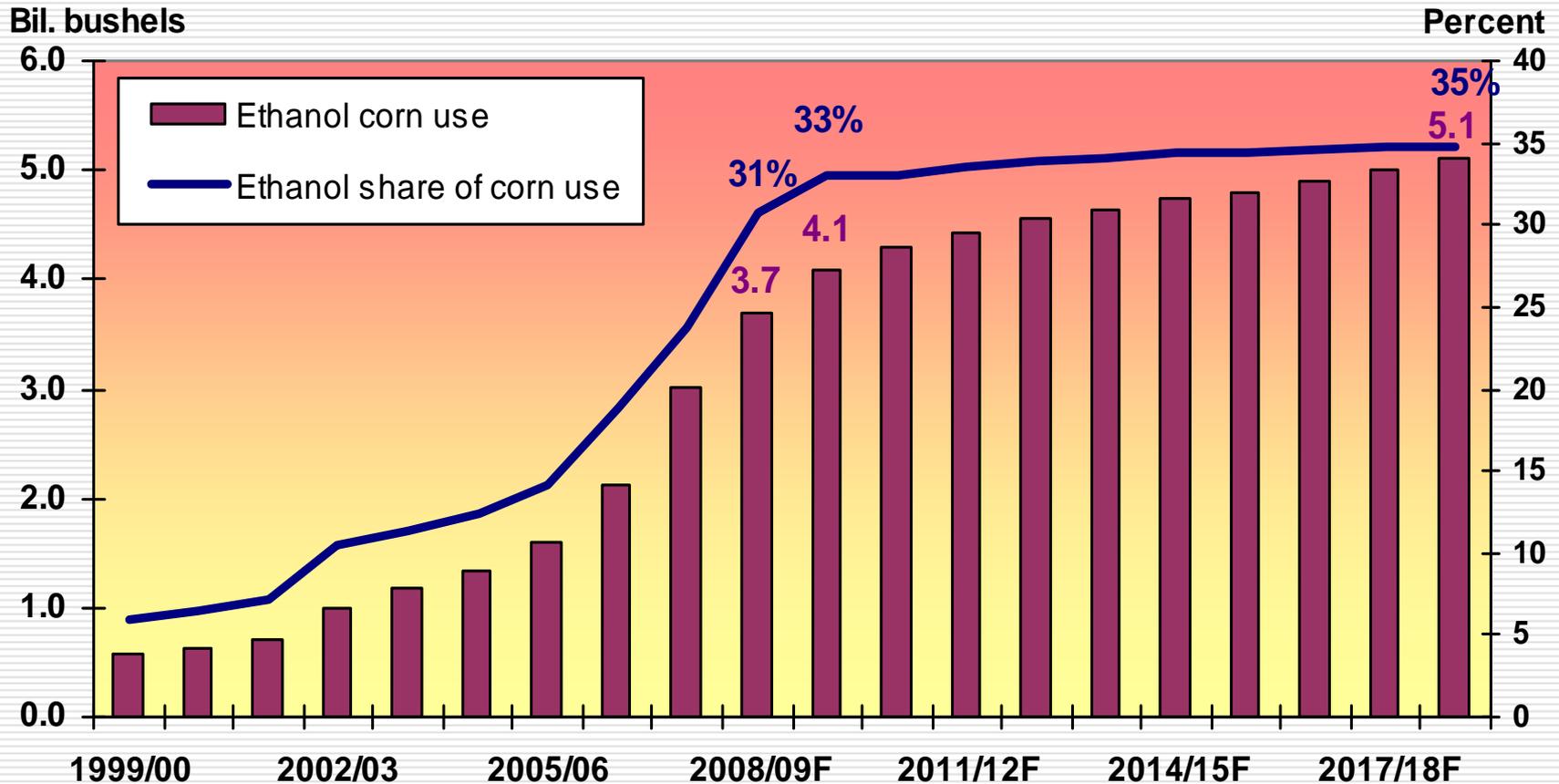
# U.S. Ethanol Production Capacity



Source: USDA-WAOB internal estimates and projections, March 11, 2009.

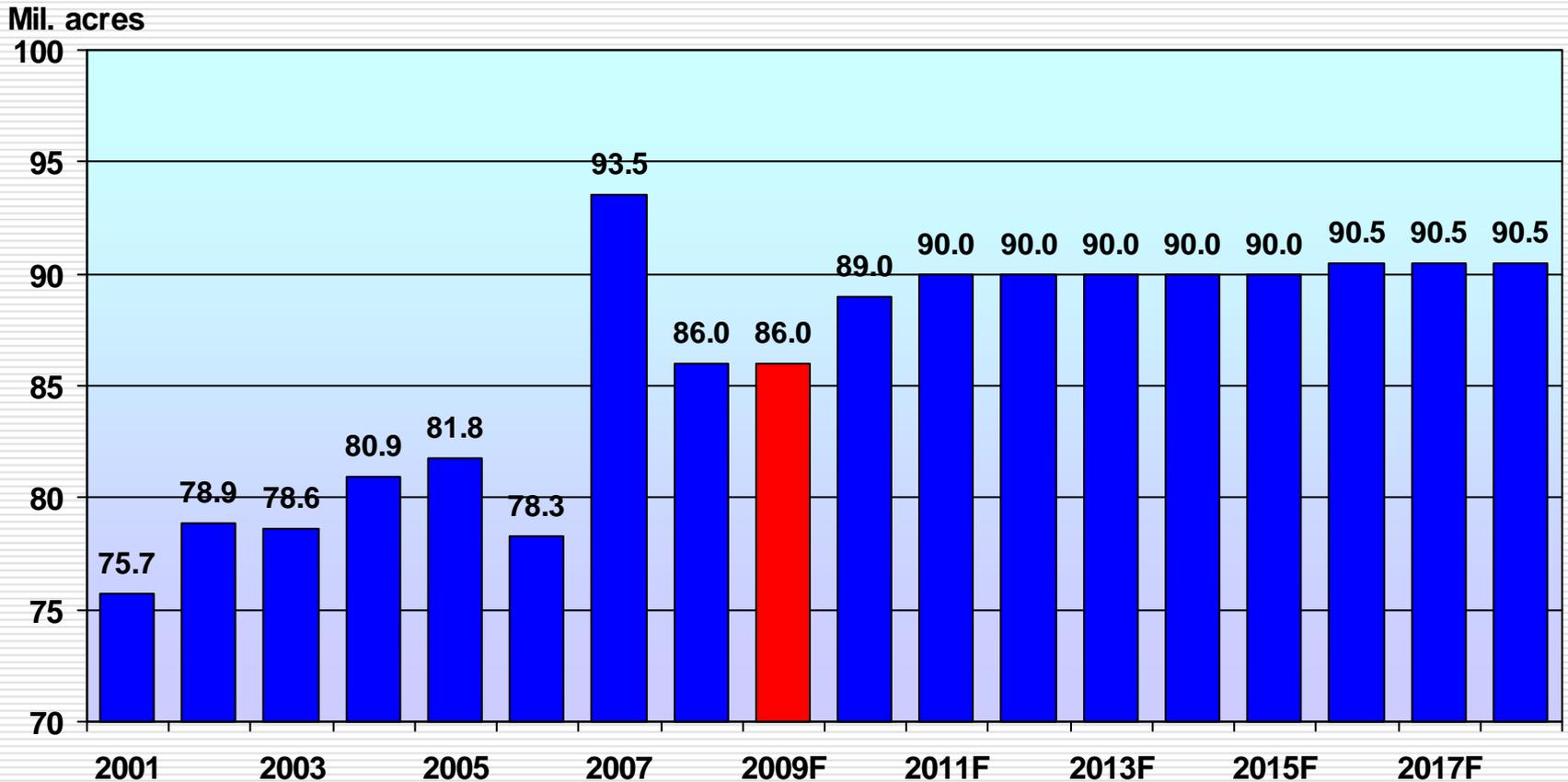
# U.S. Corn Used for Ethanol

## 1995/96 through 2018/19F



Note: 2008/09 is projected based on the *World Agricultural Supply and Demand Estimates*, March 11, 2009. 2009/10 is projected based on USDA's *Grains & Oilseeds Outlook*, Agricultural Outlook Forum, Washington, D.C., February 27, 2009. Projections for 2010/11-2018/19 are from USDA *Agricultural Projections to 2018*, February 2009.

# U.S. Corn Planted Area Trend

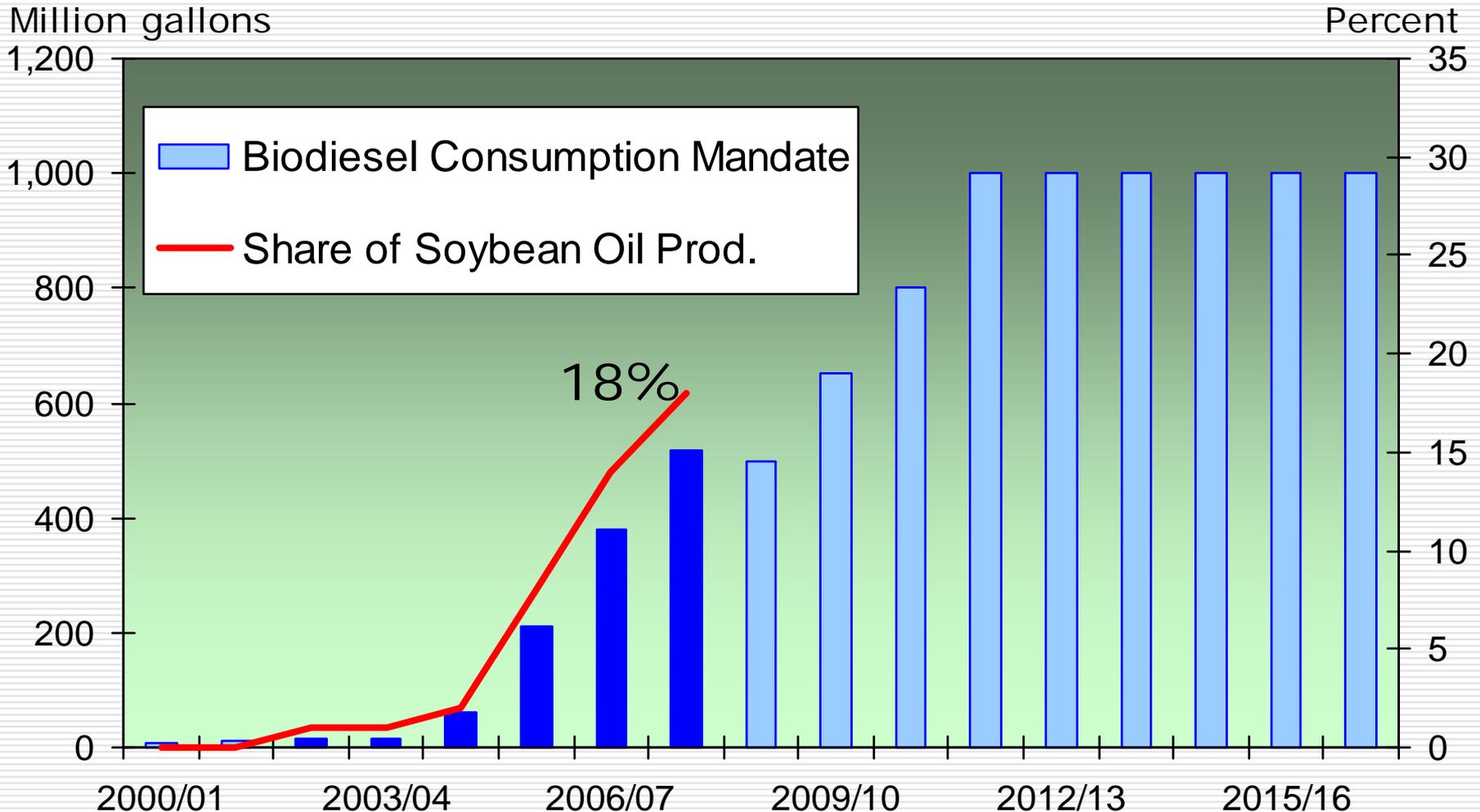


Note: 2009 planted area forecast from USDA's *Grains & Oilseeds Outlook*, Agricultural Outlook Forum, Washington, D.C., February 27, 2009. Projections for 2010-2018 are from *USDA Agricultural Projections to 2018*, February 2009.

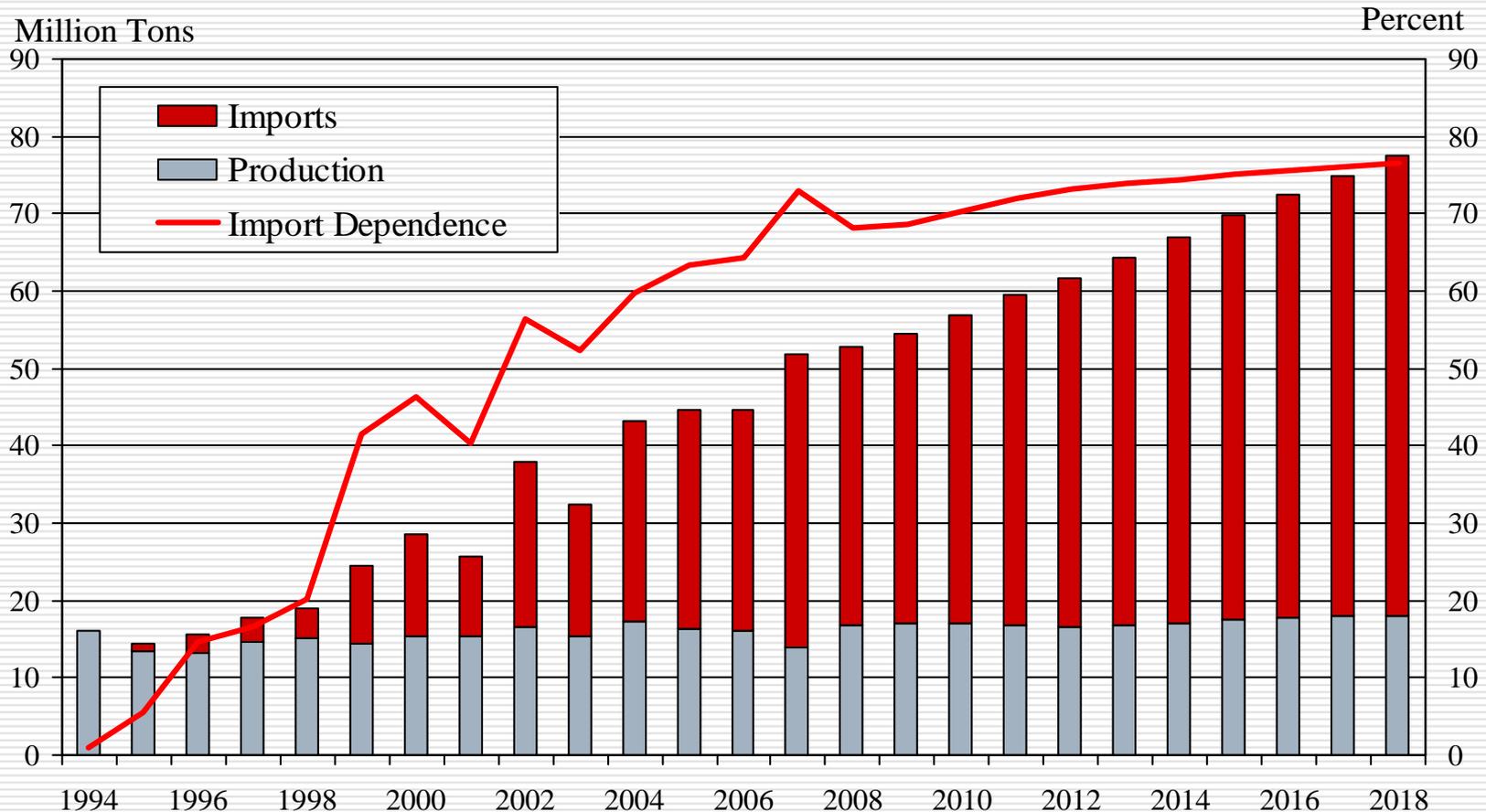
# World Corn Production

Country or Region	2007/08 estimate	2008/09 forecast	Change from 2007/08
	<i>Million Tons</i>		<i>Percent</i>
World	793.0	787.1	<b>-0.7</b>
United States	331.2	307.4	<b>-7.2</b>
Foreign	461.8	479.7	<b>3.9</b>
Argentina	22.0	13.5	<b>-38.6</b>
Brazil	58.6	49.5	<b>-15.5</b>
Mexico	23.4	25.0	<b>6.8</b>
Canada	11.6	10.6	<b>-9.0</b>
European Union	47.7	61.4	<b>28.7</b>
FSU-12	13.8	21.3	<b>54.6</b>
South Africa	13.2	12.0	<b>-8.8</b>
China	152.3	165.5	<b>8.7</b>

# U.S. Biodiesel Mandate . . . (2007 Energy Act)



# China Soybean Import Dependence Expected to Increase in the Next 10 Years



Note: 2009 forecast from USDA's Agricultural Outlook Forum, Washington, D.C., February 27, 2009.  
 Projections for 2010-2018 are from *USDA Agricultural Projections to 2018*, February 2009.

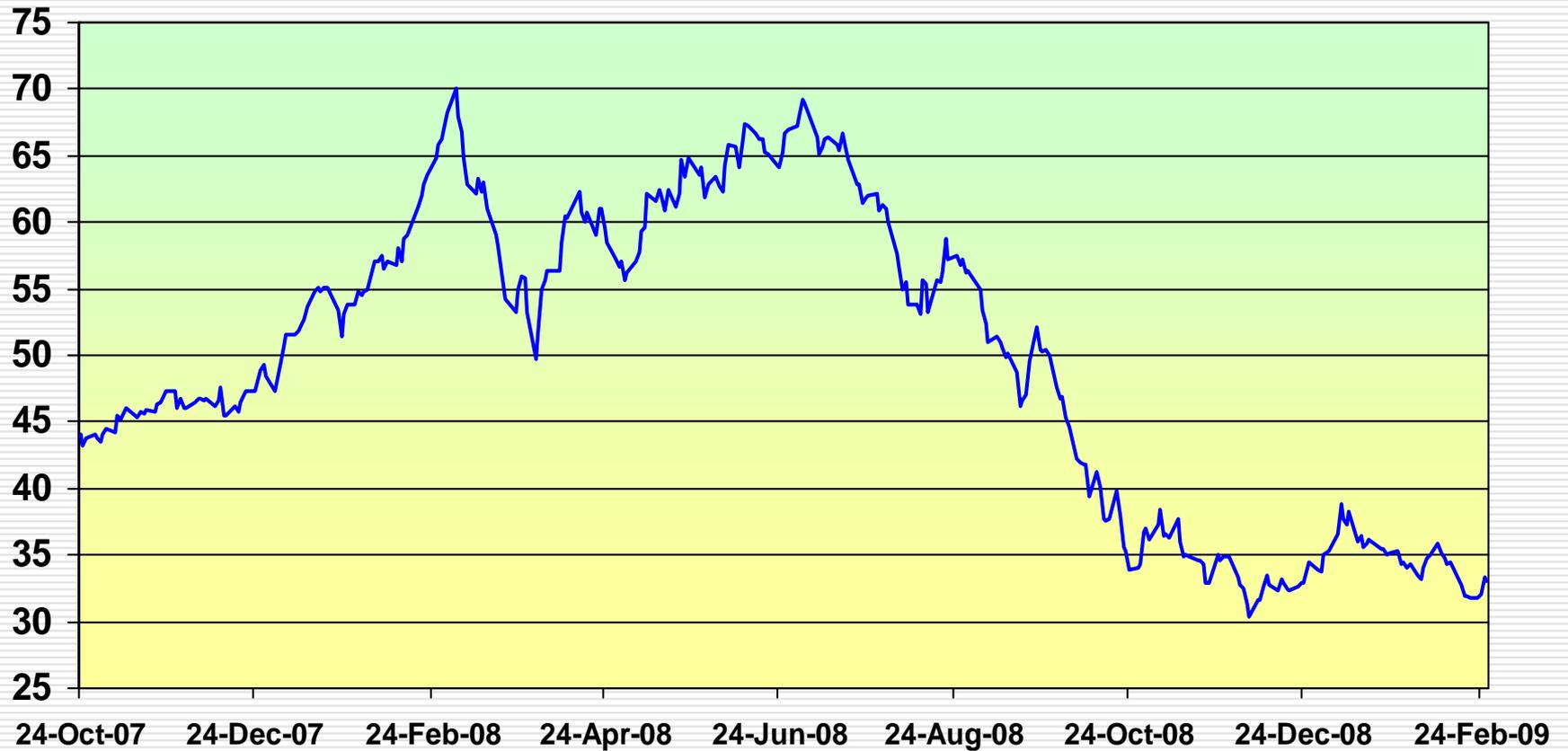
# U.S. Soybean Supply and Demand

	2007/08 estimate	2008/09 forecast	2009/10 forecast	Change from 2008/09
				<i>Percent</i>
Planted area (million acres)	64.7	75.7	77.0	1.7
Harvested area (million acres)	64.1	74.6	76.0	1.8
Yield (bushels per acre)	41.7	39.6	42.6	7.5
				<i>Million bushels</i>
Beginning stocks	574	205	210	2.4
Production	2,677	2,959	3,240	9.5
Imports	10	9	3	-66.7
<b>Total Supply</b>	<b>3,261</b>	<b>3,173</b>	<b>3,453</b>	<b>8.8</b>
Crush	1,801	1,640	1,675	2.2
Seed and Residual	93	163	172	5.5
Domestic use	1,895	1,803	1,848	2.5
Exports	1,161	1,185	1,225	3.4
<b>Total Use</b>	<b>3,056</b>	<b>2,988</b>	<b>3,073</b>	<b>2.8</b>
Ending stocks	205	185	380	105.8
				<i>Percent</i>
Stocks/use ratio	6.7	6.2	12.4	
				<i>Dollars/bushel</i>
<b>Average market price</b>	<b>10.10</b>	<b>9.35</b>	<b>8.00</b>	<b>-14.4</b>

# Soybean Oil Futures Prices

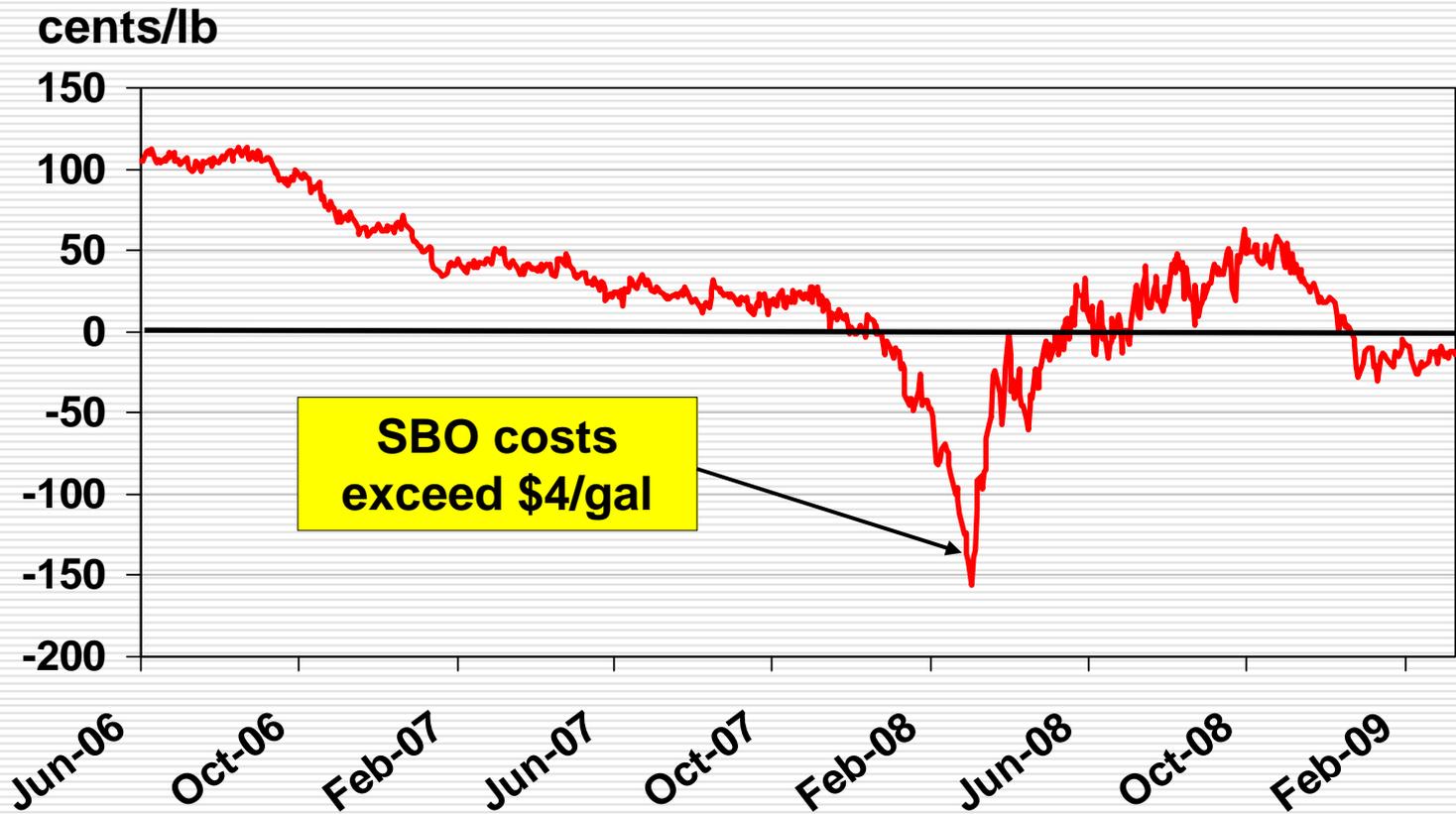
December 2009 Contract

Cents/lb.



Note: Chicago Board of Trade daily settlement prices.

# Biodiesel Margin

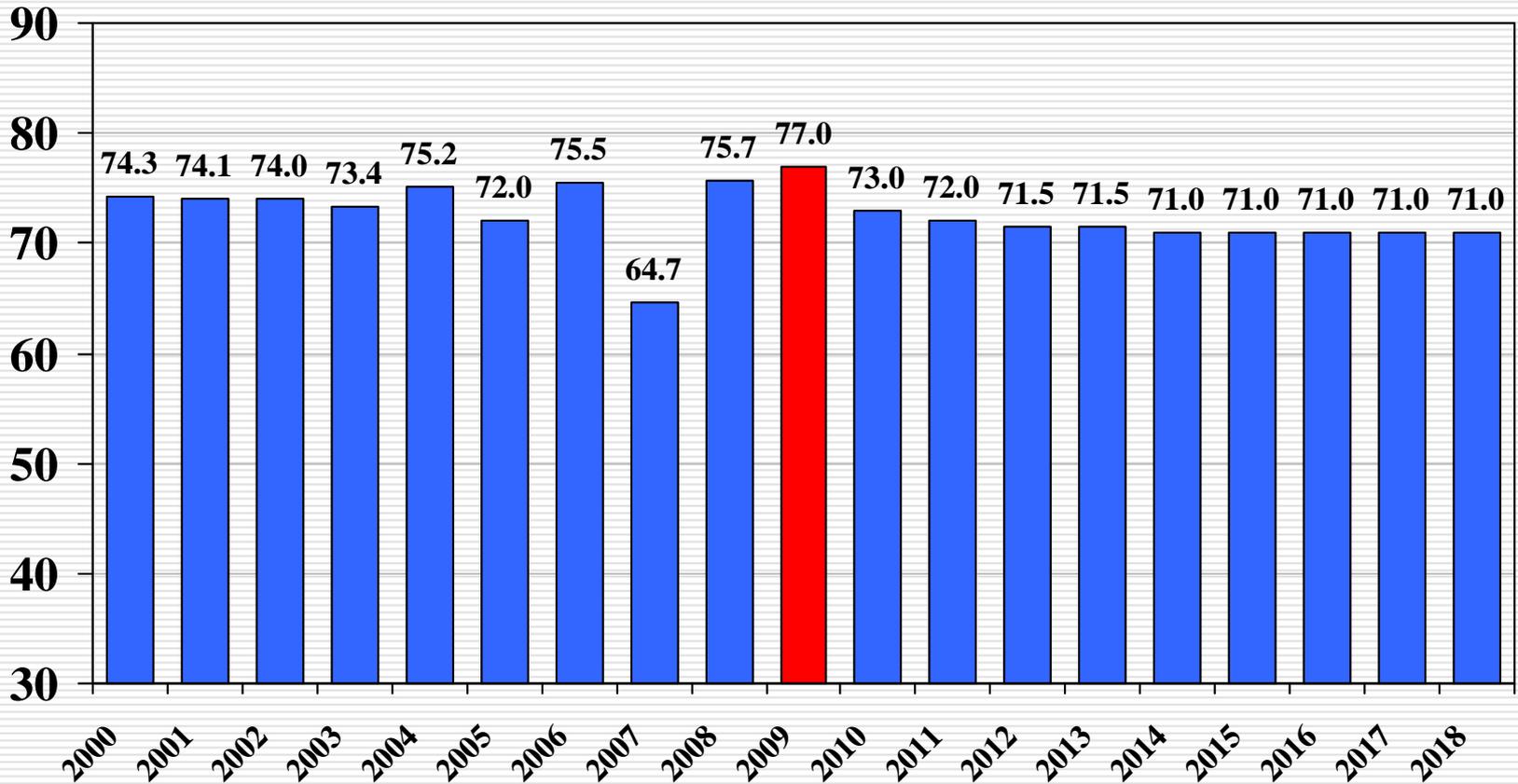


# U.S. Soybean Oil Supply and Use

	2007/08 estimate	2008/09 forecast	2009/10 forecast	Change from 2008/09
	<i>Million pounds</i>			<i>Percent</i>
<b>Beginning stocks</b>	<b>3,085</b>	<b>2,483</b>	<b>2,243</b>	<b>-9.7</b>
<b>Production</b>	<b>20,568</b>	<b>18,645</b>	<b>19,095</b>	<b>2.4</b>
<b>Imports</b>	<b>65</b>	<b>50</b>	<b>60</b>	<b>20.0</b>
<b>Total supply</b>	<b>23,718</b>	<b>21,178</b>	<b>21,398</b>	<b>1.0</b>
<b>Domestic use</b>	<b>18,327</b>	<b>16,900</b>	<b>17,400</b>	<b>3.0</b>
<b>Methyl ester</b>	<b>2,981</b>	<b>2,200</b>	<b>2,900</b>	<b>31.8</b>
<b>Exports</b>	<b>2,908</b>	<b>1,500</b>	<b>1,750</b>	<b>16.7</b>
<b>Total use</b>	<b>21,235</b>	<b>18,400</b>	<b>19,150</b>	<b>4.1</b>
<b>Ending stocks</b>	<b>2,483</b>	<b>2,778</b>	<b>2,248</b>	<b>-19.1</b>
	<i>Cents per pound</i>			
<b>Average market price</b>	<b>52.03</b>	<b>30.00</b>	<b>31.00</b>	<b>3.3</b>

# U.S. Soybean Planted Area Trend

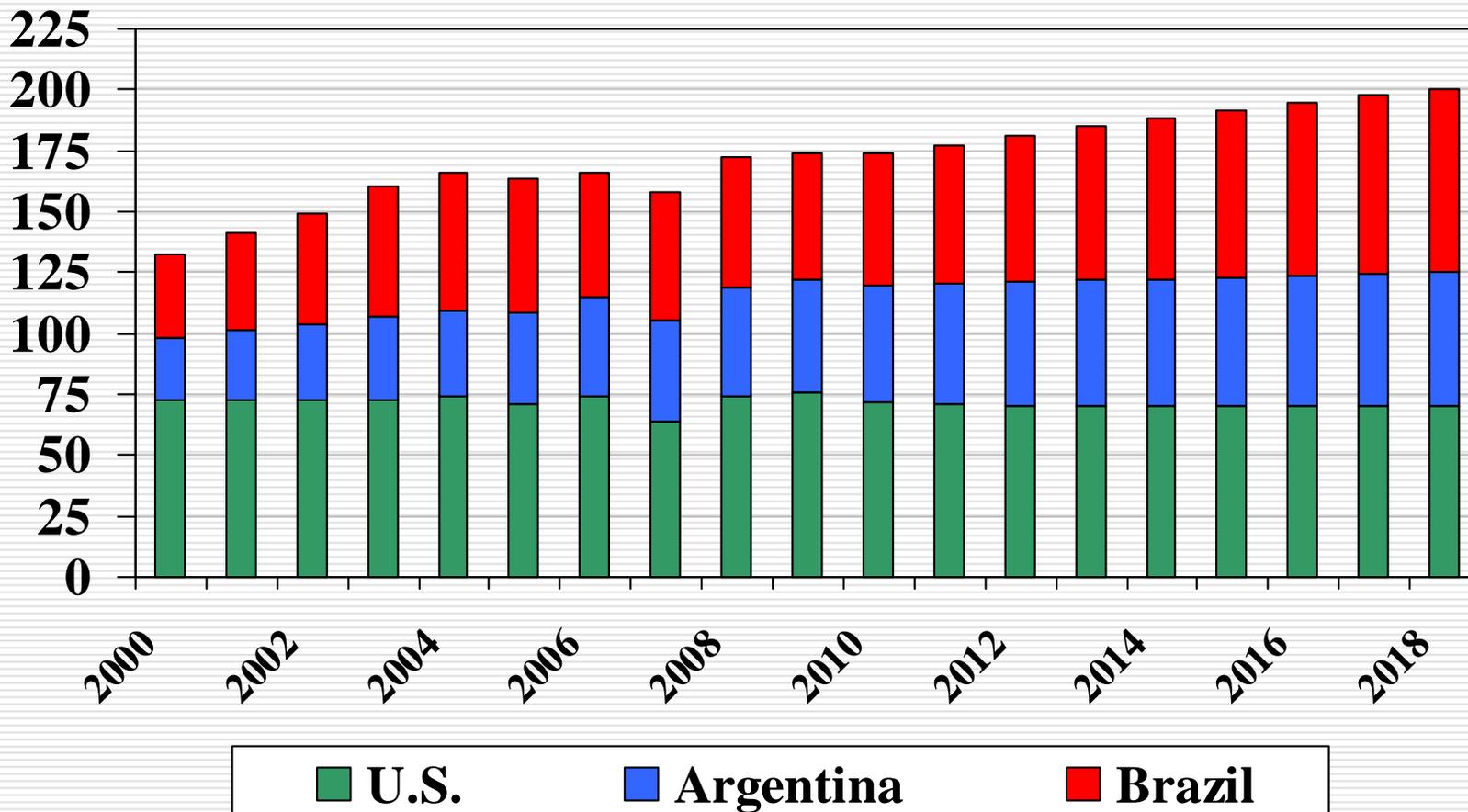
Million Acres



Note: 2009 forecast from USDA's Agricultural Outlook Forum, Washington, D.C., February 27, 2009.  
Projections for 2010-2018 are from *USDA Agricultural Projections to 2018*, February 2009.

# Soybean Harvested Area

Million Acres

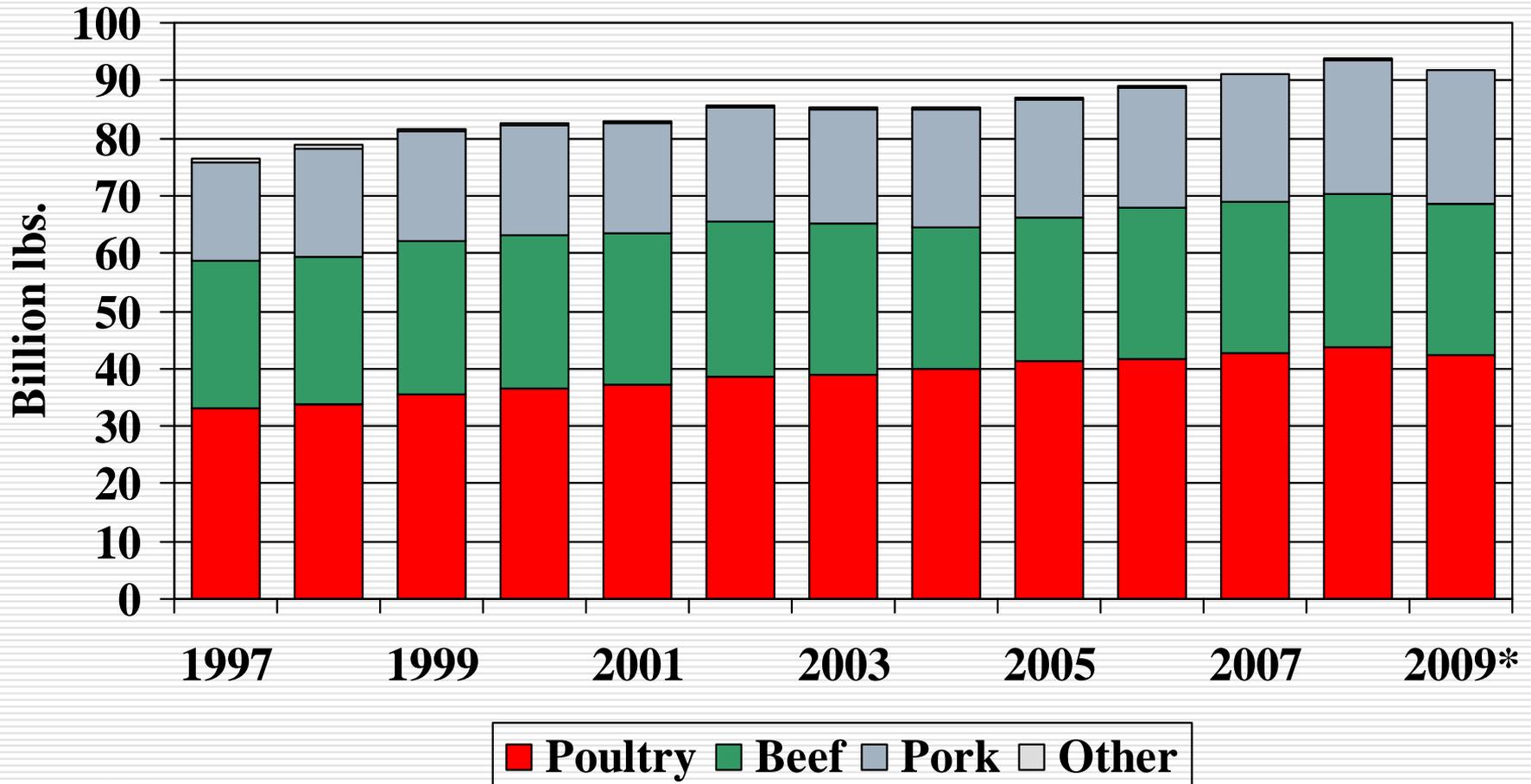


Note: 2009 forecast from USDA's Agricultural Outlook Forum, Washington, D.C., February 27, 2009.  
Projections for 2010-2018 are from *USDA Agricultural Projections to 2018*, February 2009.

# World Soybean Production

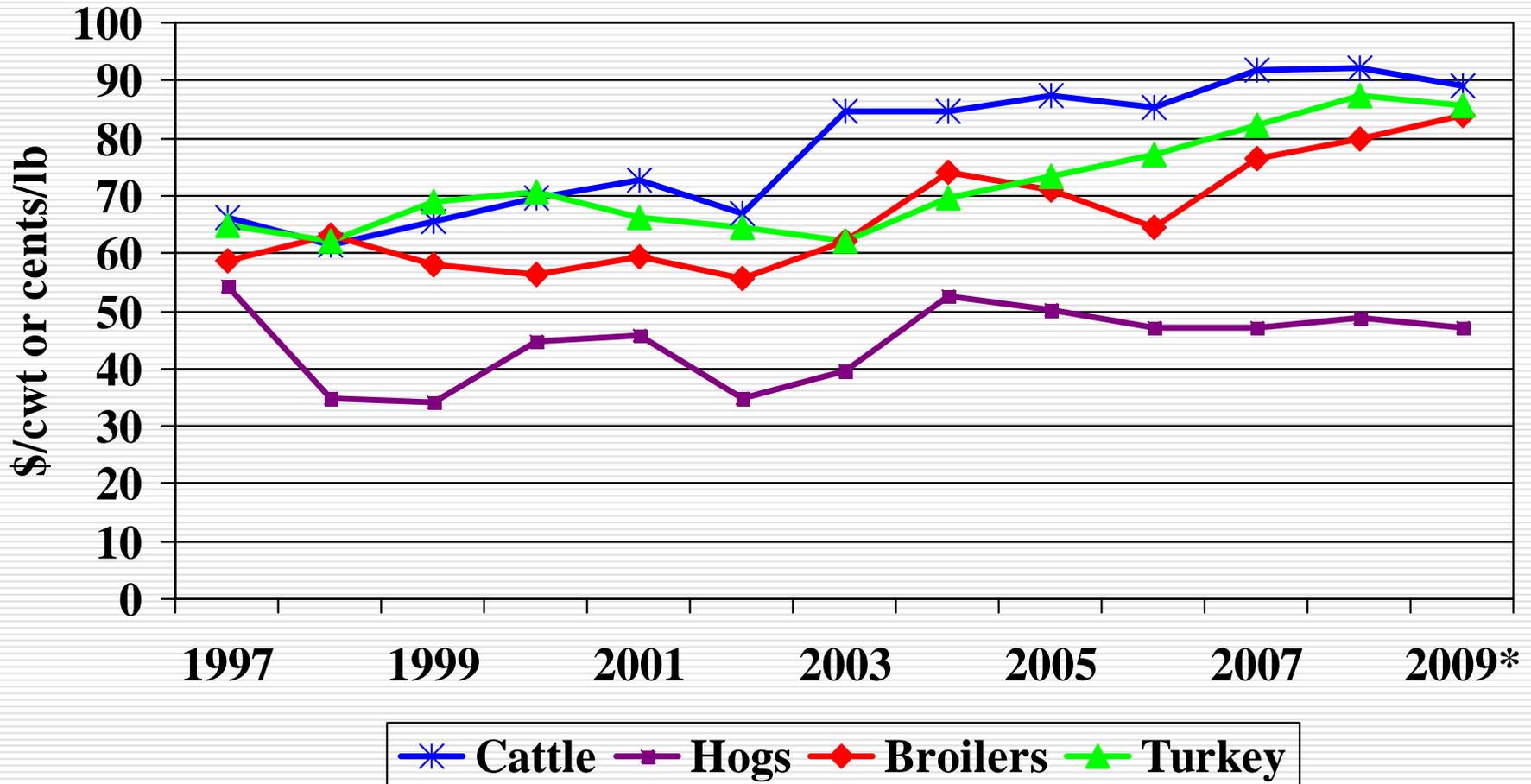
Country or Region	2007/08 estimate	2008/09 forecast	Change from 2007/08
	<i>Million Tons</i>		<i>Percent</i>
World	220.9	223.3	<b>1.1</b>
United States	72.9	80.5	<b>10.5</b>
Foreign	148.0	142.7	<b>-3.6</b>
Argentina	46.2	43.0	<b>-6.9</b>
Brazil	61.0	57.0	<b>-6.6</b>
Paraguay	6.8	4.0	<b>-41.2</b>
China	14.0	16.8	<b>20.0</b>

# Total Meat Production forecast to decline 2 percent in 2009



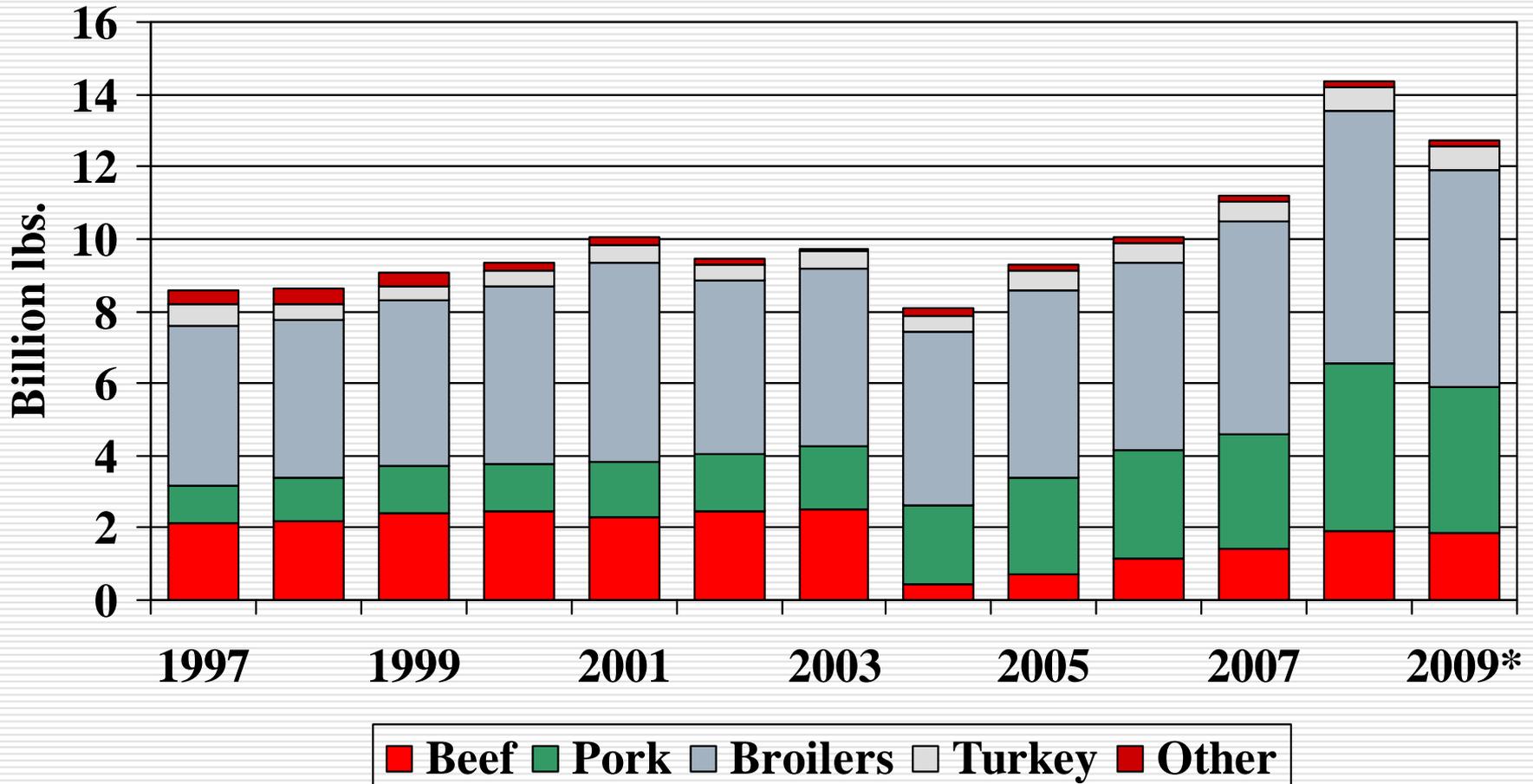
\* Forecast

# Livestock and Poultry Prices Generally Weaker



\* Forecast

# Red Meat and Poultry Exports forecast to decline for first time since 2004



\* Forecast

# U.S. Dairy Product Prices

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	2008 forecast	2009 forecast	Change from 2008
<b>Product prices</b>	<i>Dollars/pound</i>		<i>Percent</i>
<b>Cheese</b>	1.90	1.24	-34.3
<b>Butter</b>	1.44	1.15	-19.8
<b>Nonfat dry milk</b>	1.23	0.83	-32.4
<b>Dry whey</b>	0.25	0.18	-29.9
<b>Class prices</b>	<i>Dollars/cwt</i>		
<b>Class III</b>	17.44	10.35	-40.6
<b>Class IV</b>	14.65	9.85	-32.8
<b>All milk</b>	18.32	11.55	-36.9

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# Key USDA Releases

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- March 31 - NASS *Prospective Plantings* Report
- April 9 – **WASDE** - Updated 2008/09 Forecasts
- May 12 – **WASDE** – Updated 2008/09 Forecasts - plus - First “Official” 2009/10 Forecasts

**END**

Harrisburg Presentation