

FarmEcon LLC

A source of information on global farming
and food systems

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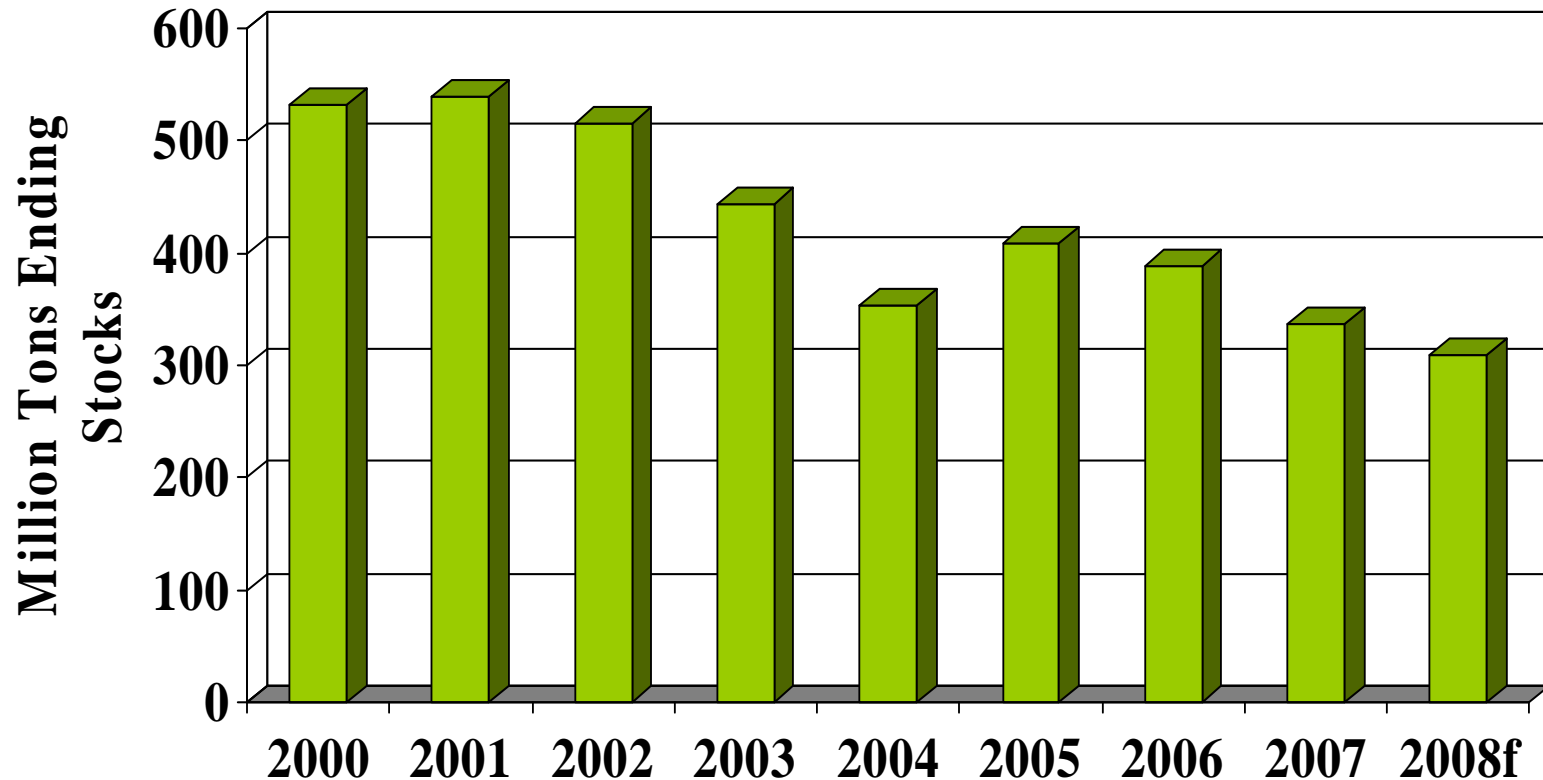
Biofuels Increasing Impact on the Chicken Market



Dr. Thomas E. Elam
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Ending global grain stocks trending down from 2001 point to demand growing faster than production.



Major factors in chicken cost outlook

- Weak dollar and strong export demand
- Economic growth in China and elsewhere
- Declining net grain exports of EU
- Drought in Australia, poor 2007 EU crop
- 2008 Midwest floods
- **Biofuels and biofuels policy are major causes of higher broiler costs**

Why ethanol is so important

- It's the only item we could change
- Ethanol demand/price
 - Based on the energy market, not food
 - Brings in a whole new set of dynamics
 - Raises feed costs to a new plateau
- Subsidies are adding to costs of food **and** biofuel production

Three legs of the ethanol program

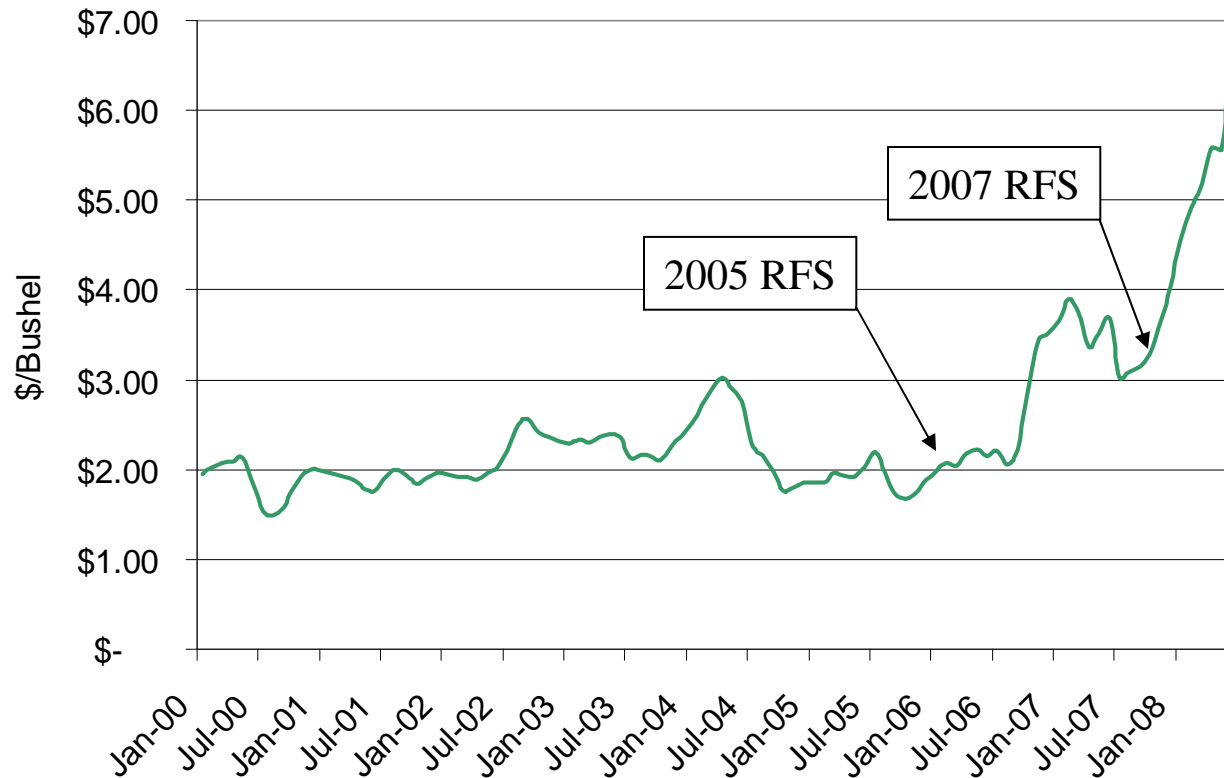
- RFS – mandated use of 9 billion gallons for 2008
- Tax credit - \$0.51 per gallon for all ethanol blended
- Tariff of \$0.54 per gallon

Cost outlook & ethanol

- Ethanol production has reached a level where price rationing for feed use is happening
- 3 major demand sources:
 - Feed
 - Exports
 - Food, Seed and Industrial
 - Ethanol is the only growing piece
 - Ethanol demand growth is not all market-driven
- Who will cut back to make room for ethanol?
- How are other crops affected?

Does the RFS affect corn prices?

Corn Price East Central Illinois



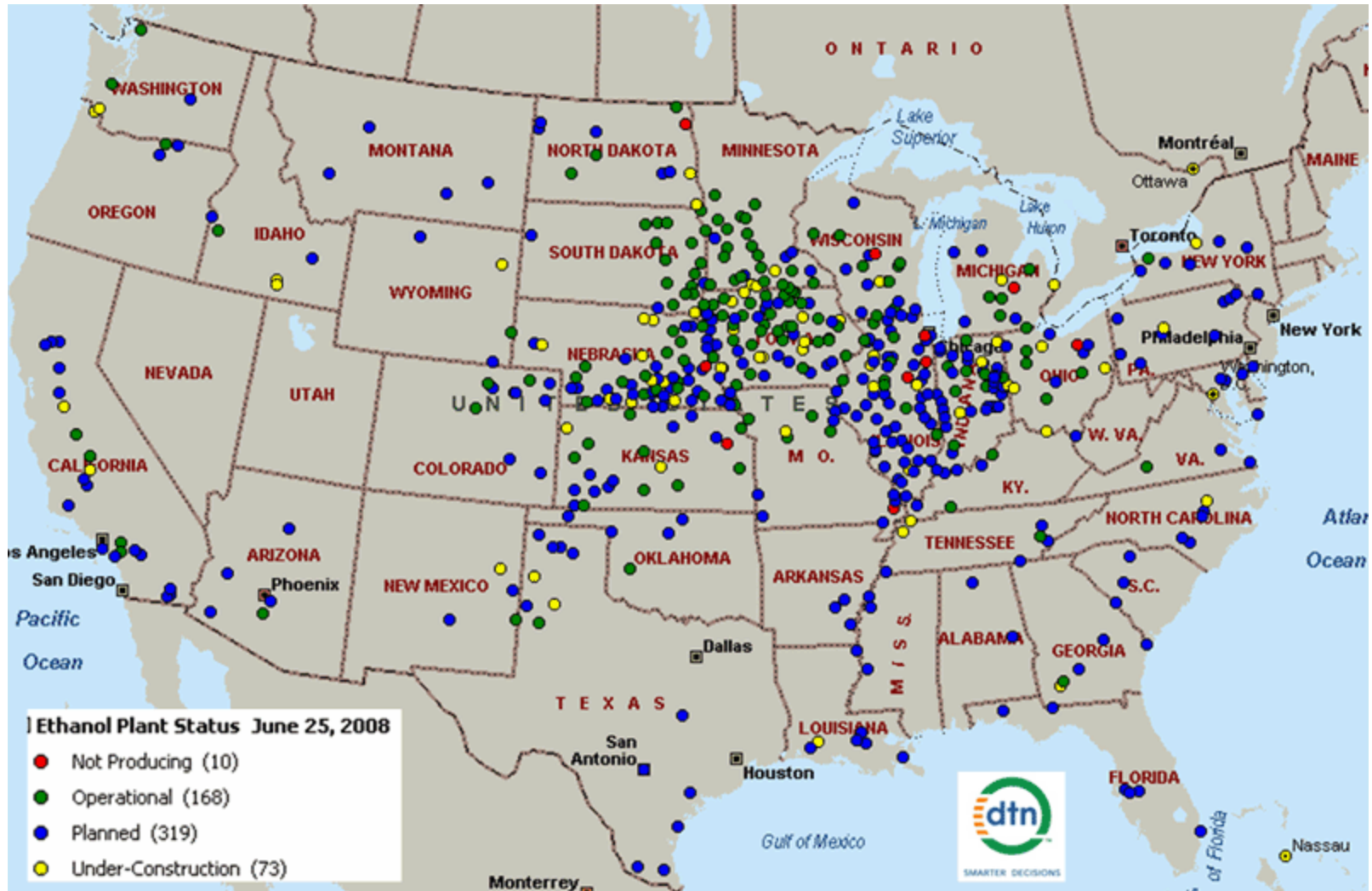
2008/2009 ethanol effects

- Increased 2007 corn acreage caused doubled soybean meal prices
- 2008 battle for acres
 - Corn acres needed to increase
 - Soybean prices prevented that
 - General run-up in all feed costs
- Then came the floods
- The **REAL** food vs. fuel battle is just starting

Some ethanol facts

- 20 gallon tank of E10 (10% ethanol) uses enough corn to feed 7 five pound broilers.
- Universal U.S. use of E85 = entire global grain supply
- 2008 U.S. ethanol mandate = Australia and Indonesia grain crops
- Current and planned Iowa ethanol plants could use more than the entire Iowa corn supply
- Converting entire corn crop to ethanol = 15% of gasoline supply and 10% of oil imports

Ethanol plant locations and status



*Alaska has one ethanol plant in the planning stage

*Hawaii has two ethanol plants in the planning stage

Ethanol industry is overbuilding

Ethanol Plants	Rated-Real* Capacity (billions of gallons per year)	Corn Needed (billion bushels) Rated-Real	Corn available at affordable price (billion bushels)
Existing (161)	9.4-10.3	3.4-3.7	
Expanding (7) or Under Construction (42)	4.3-4.73	1.5-1.7	
Total	13.6-15.0	4.9-5.4	3.9

Gap of 1.0 to 1.5 billion bushels = some idle capacity

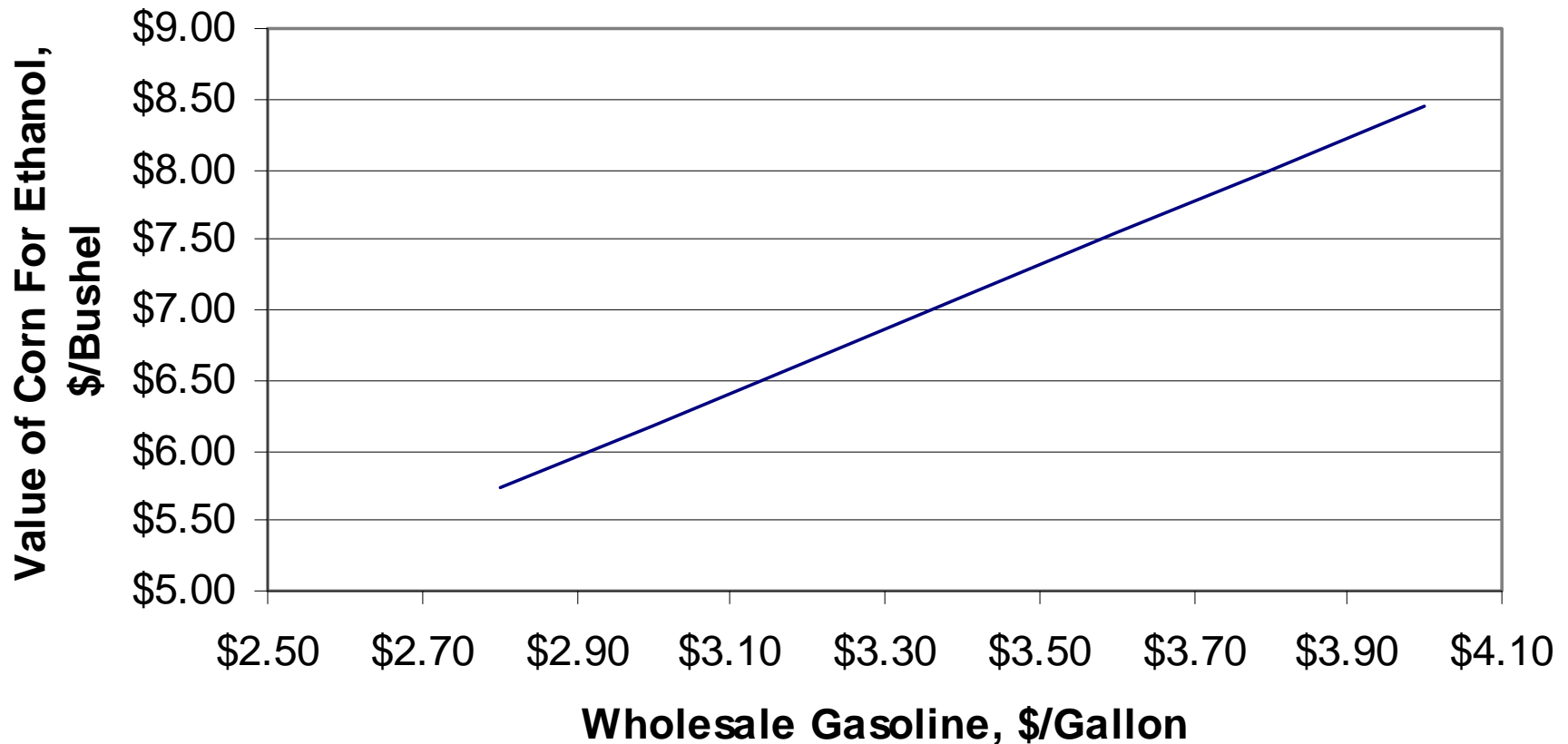
Plant data from Renewable Fuels Association
 Corn needed based on 2.75 gallons ethanol/bushel

* Ethanol plants are certified conservatively and can generally operate at 110% or more of rated capacity

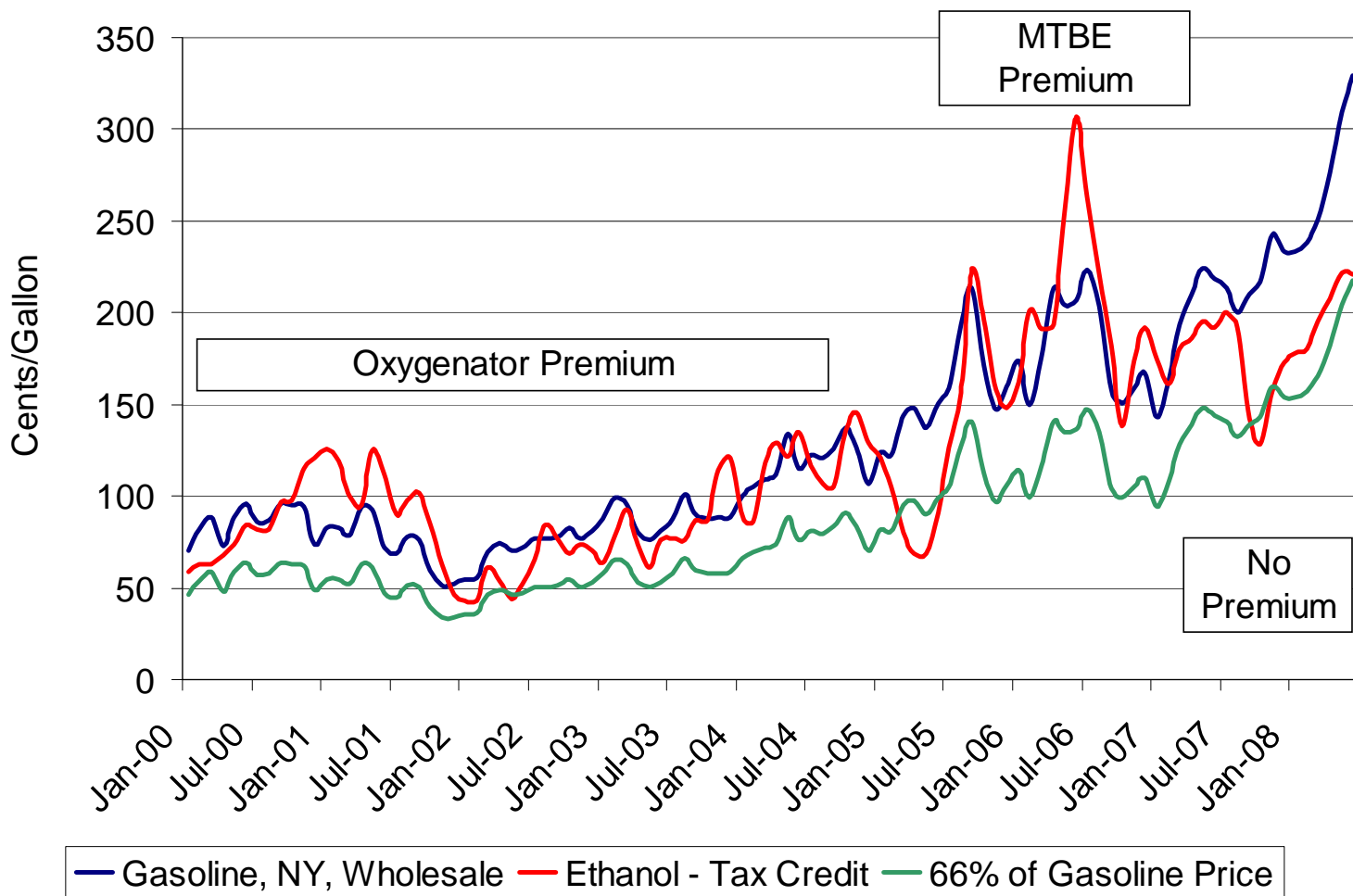
Policy hurting even “them”!

- 10+ plants currently closed
- Likely to have more closures – overbuilt capacity
- Several bankruptcies in last 2 months
- Plant plans being cancelled:
 - OMAHA (DTN) -- Kansas City-based ethanol-development company Alternative Energy Sources Inc. has decided to close its business, according to a company filing Wednesday with the U.S. Securities and Exchange Commission.

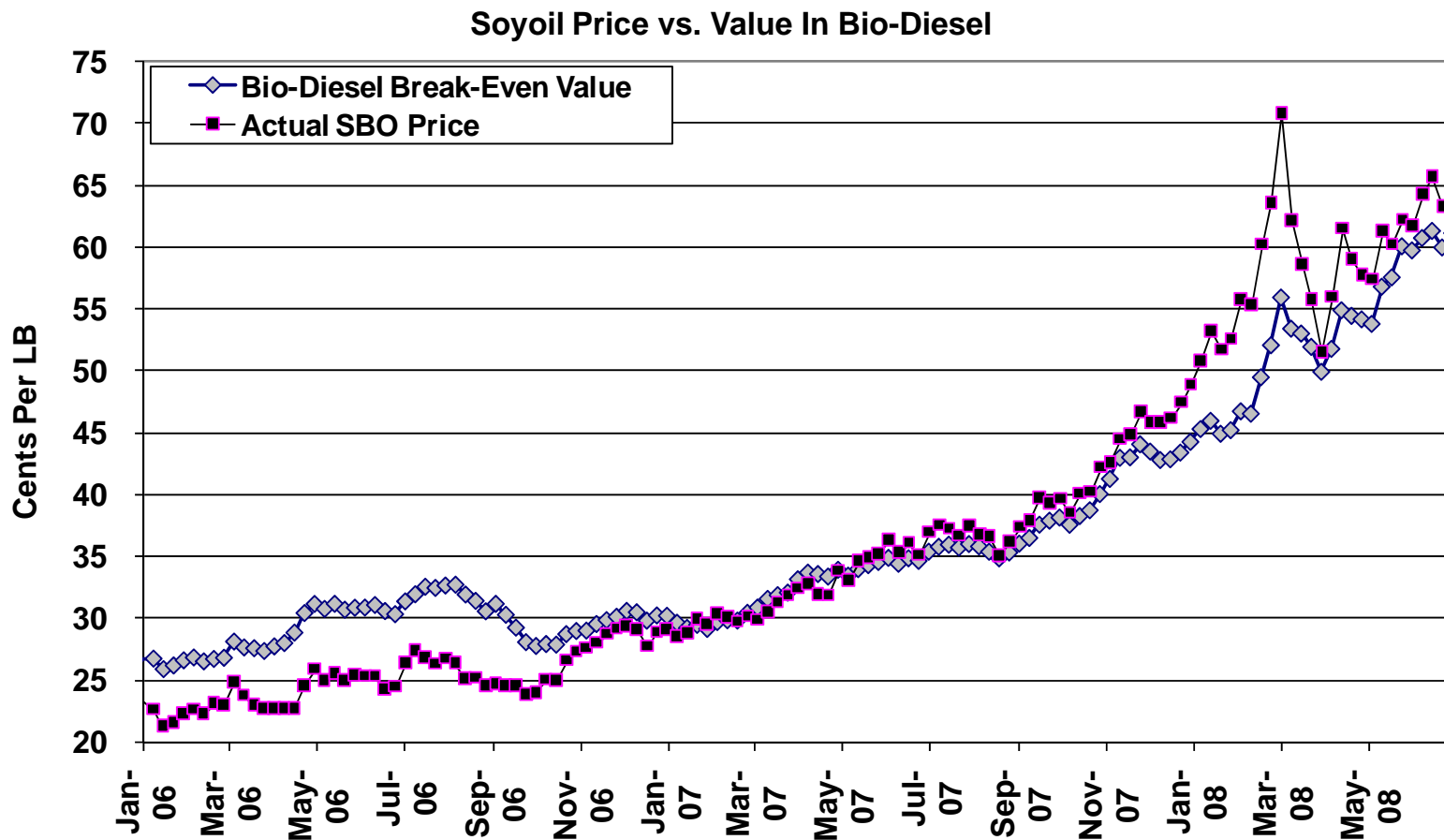
Energy price and corn's ethanol value



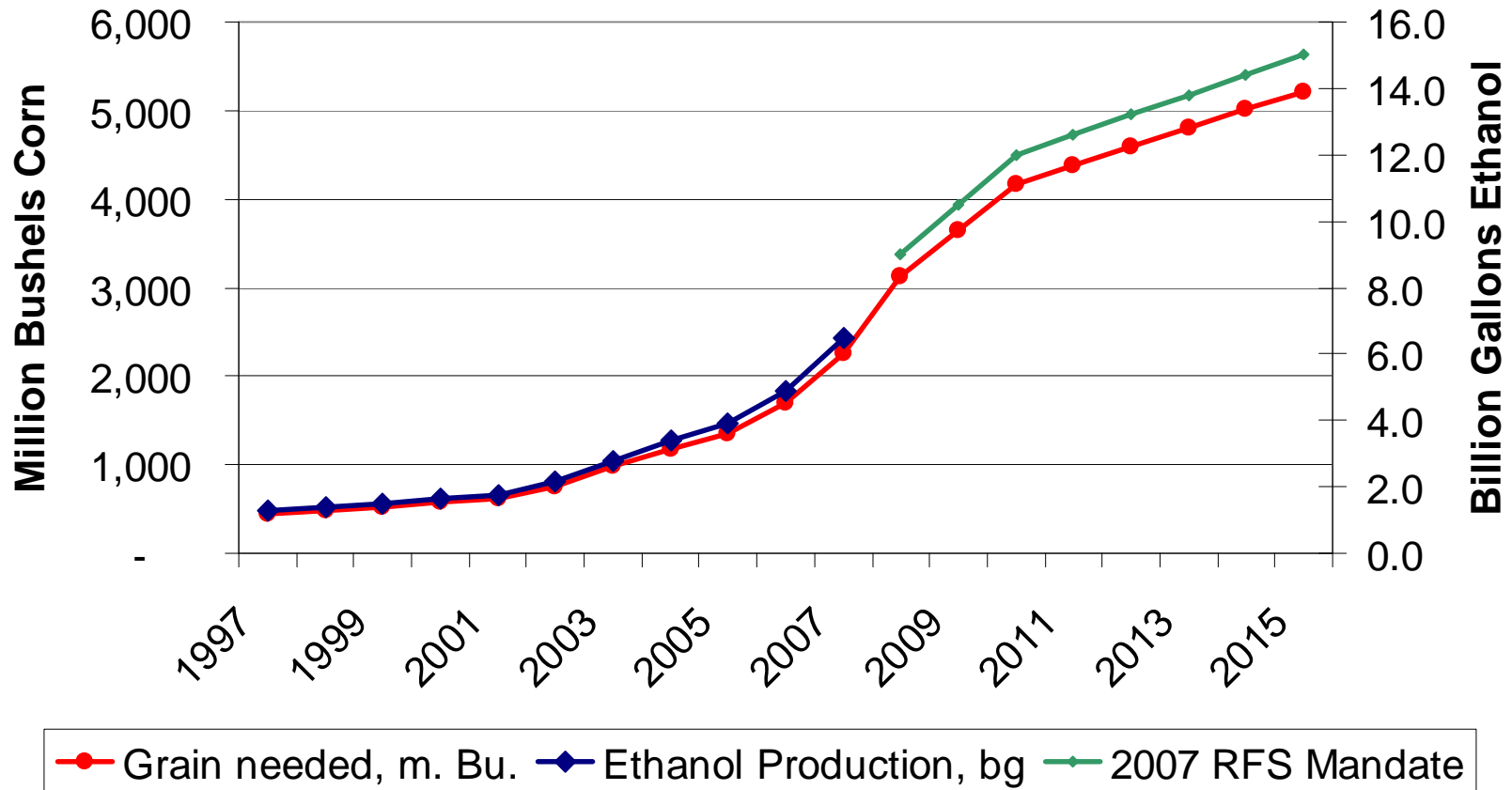
Gasoline and ethanol prices



Soyoil price and biodiesel value



Actual/Mandated U.S. ethanol production and corn required



Corn Outlook – 2008/2009*

	<i>2006/2007</i>	<i>Forecast 2007/2008</i>	<i>Forecast 2008/2009</i>
Planted Acres, Million	78.3	93.6	87.3
Harvested Acres, Million	70.6	86.1	78.9
Yield, Bu./Acre	149.1	151.1	145.0
Beginning Stocks, Mill. Bu.	1,967	1,304	1,483
Production, Mill. Bu.	10,535	13,074	11,441
<i>Supply, Mill. Bu.</i>	<i>12,502</i>	<i>14,378</i>	<i>12,924</i>
Feed Use, Mill. Bu.	5,598	6,050	5,050
Exports, Mill. Bu.	2,125	2,450	2,000
Food, Seed, Industrial, Mill. Bu.	3,488	4,360	5,110
Fuel Ethanol, Mill. Bu.	2,117	3,000	3,750
Total Use, Mill. Bu.	11,210	12,860	12,160
Ending Stocks, Mill, Bu.	1,304	1,483	764
Average Farm Price, \$/Bu.	\$3.04	\$4.50	\$6.50

* September 1 Crop Year

Soybean Outlook – 2008/2009*

	2006/2007	Forecast 2007/2008	Forecast 2008/2009
Planted Acres, Million	75.5	63.7	74.5
Harvested Acres, Million	74.6	62.8	72.1
Yield, Bu./Acre	42.7	41.2	39.5
Beginning Stocks, Mill. Bu.	449	574	125
Production, Mill. Bu.	3,188	2,585	2,848
Supply, Mill. Bu.	3,637	3,159	2,973
Crush Use, Mill. Bu.	1,806	1,840	1,760
Exports, Mill. Bu.	1,118	1,110	900
Seed	78	92	86
Residual	70	2	79
Total Use, Mill. Bu.	3,074	3,044	2,825
Ending Stocks, Mill, Bu.	574	125	148
Soymeal Average Price, \$/Ton	\$205	\$340	\$390
Soybean Average Price, \$/Bu.	\$6.43	\$11.50	\$12.50

* September 1 Crop Year

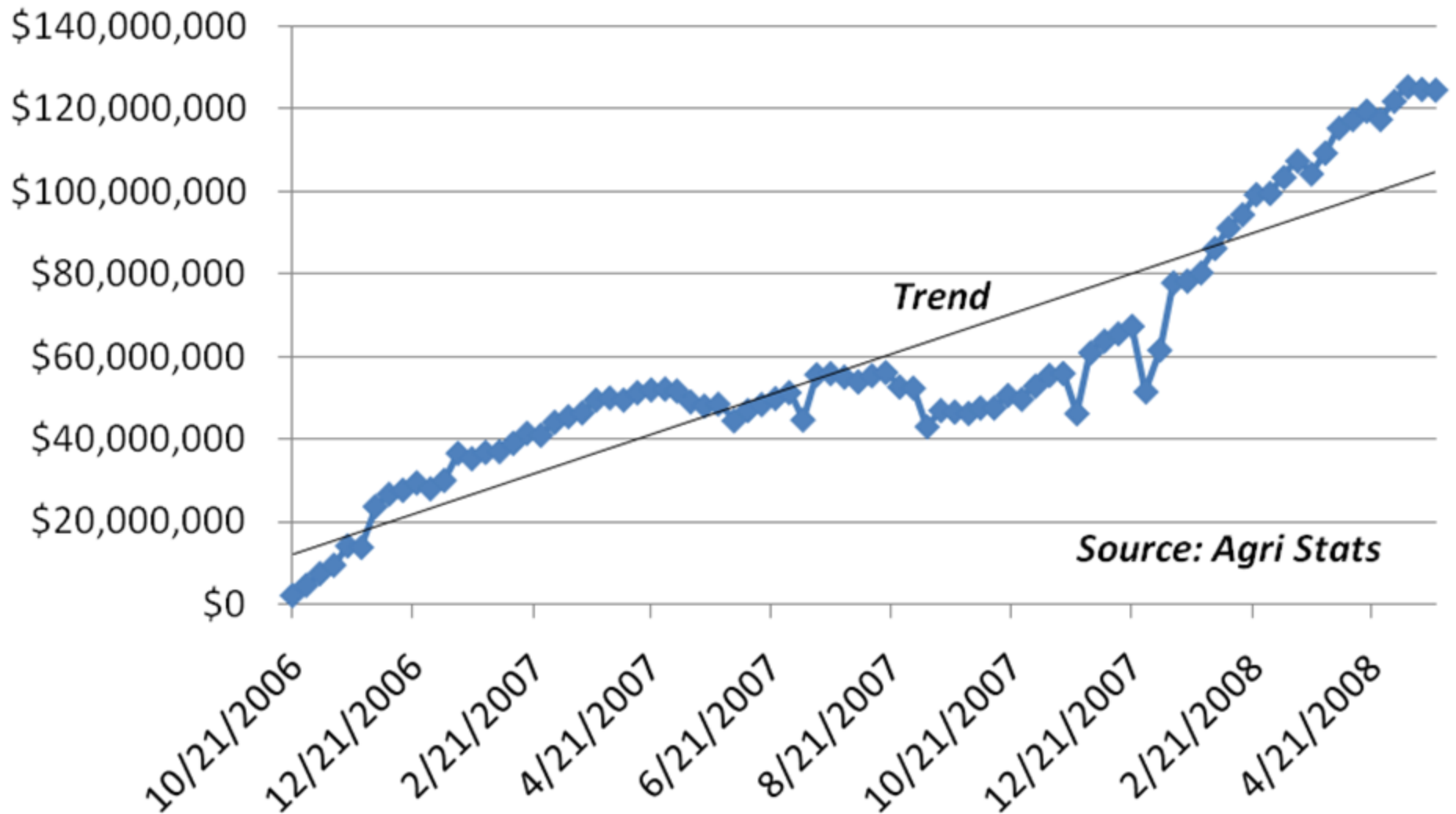
*Feed Cost Outlook – 2008/2009**

	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008/09</i>
Corn Price, Central Ill. (\$/Bu.)	\$1.90	\$2.40	\$3.50	\$6.50
Soybean Meal Price (\$/ton , 47%)	\$191	\$177	\$236	\$390
Broiler feed costs (¢/lb, Live)	15¢	15¢	20¢	32¢
Broiler feed costs (¢/lb, RTC)	22¢	22¢	30¢	47¢

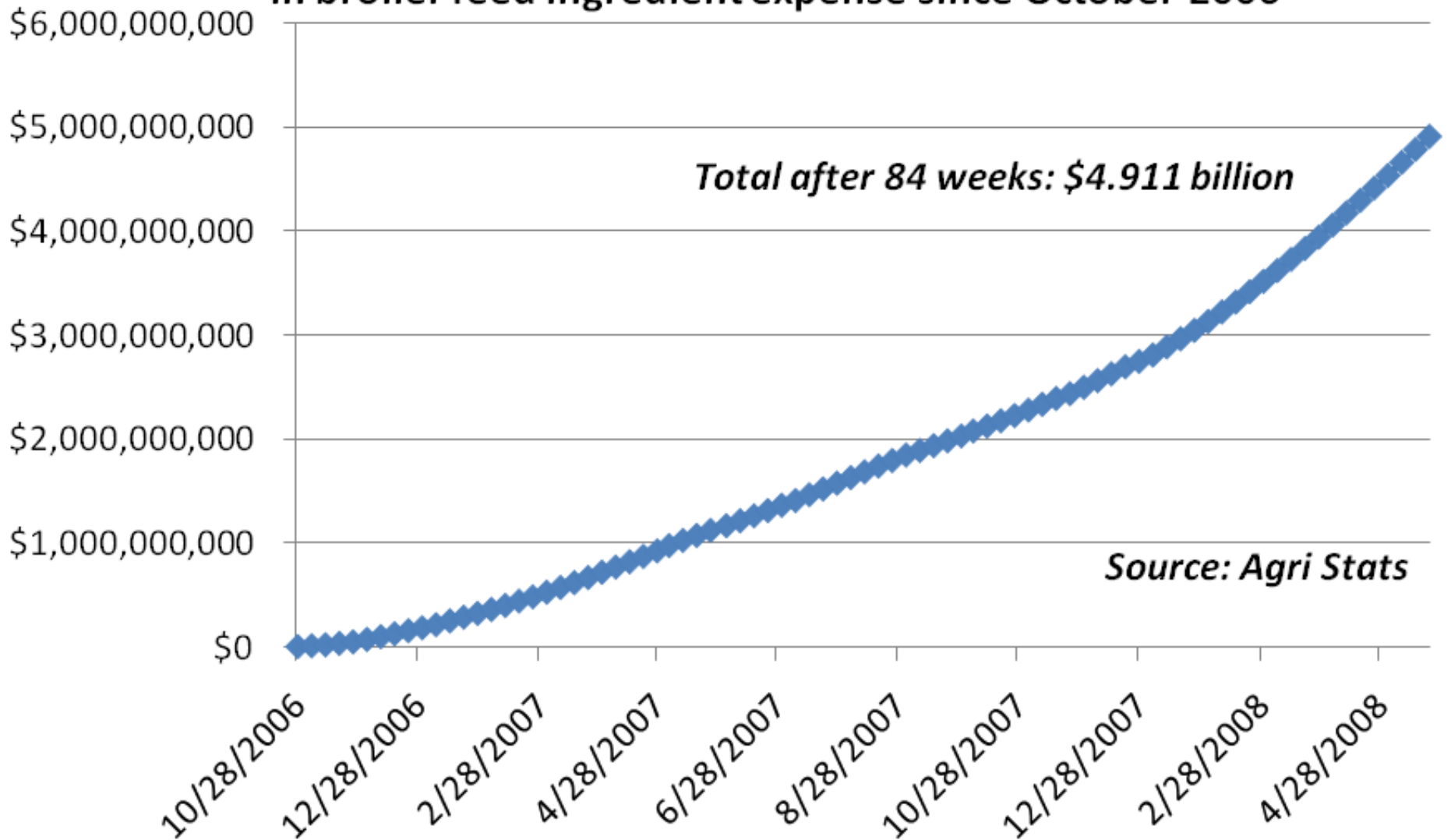
***Add \$0.50/bu. for corn and \$20/ton for soybean transportation and handling**

Based on 1.9:1 FCR, 58% corn, 33% SBM, 3% meat and bone meal, 3% grease, 3% “other” diet

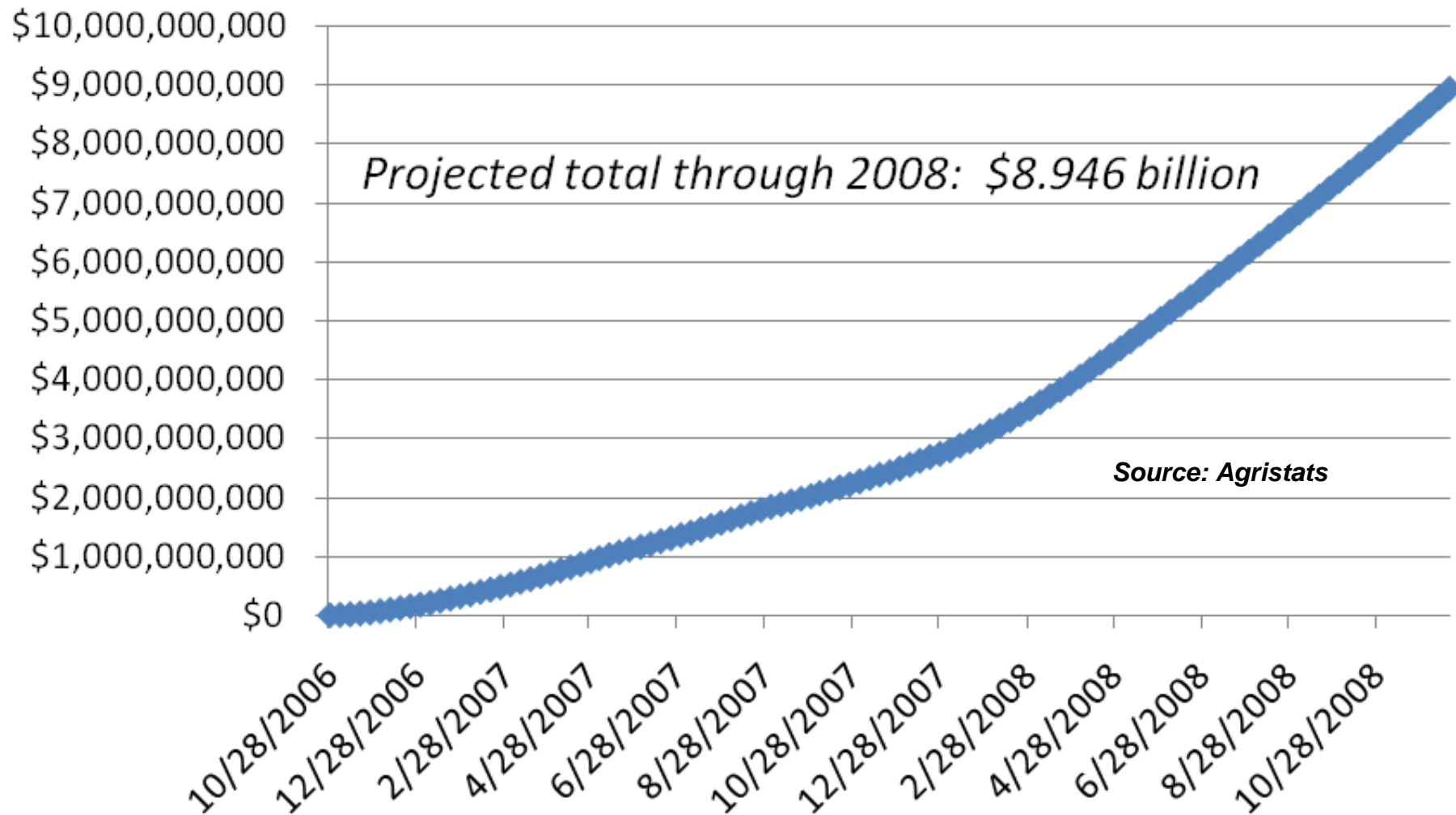
Additional cost per week to the broiler chicken industry in feed ingredient expense since October 2006



Cumulative additional cost to the chicken industry in broiler feed ingredient expense since October 2006



Cumulative additional cost to the chicken industry in broiler feed ingredient expense projected through 2008



The “good” news is:

- We have been here before, but not often
- Chicken producers can eventually pay more for corn than ethanol producers
 - Because the industry can shrink and prices WILL go up to cover higher costs
 - Ethanol producers are slaves to oil prices
- Oil prices may eventually come down too

Take home points

- Costs will never go back to 2006 levels
- Biofuels are a significant cause of higher costs
 - Chicken industry pressing to reduce biofuels subsidies
- Higher costs will be passed to consumers
- 2009 chicken production likely to decline
- Entire marketing chain affected
- Broilers are cost efficient converters of feed
 - Broilers will remain America's #1 meat protein
 - Broiler share of total meat production may grow