

Food and Fuel

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National Biodiesel Board

September 23, 2008



Questions at the Heart of the Debate

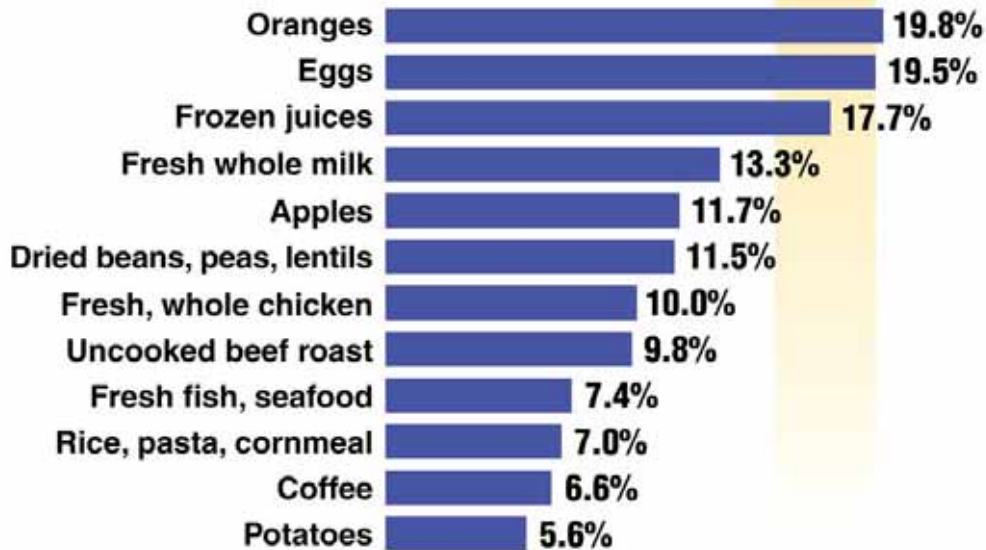


How much impact does biofuels have on food prices?

Will there be enough commodities for food and industrial uses?

Food prices on the rise

Percent change in prices for some common food items, June 2006 to June 2007:



Source: U.S. Commerce Department

Graphic: Angela Smith, Judy Treible

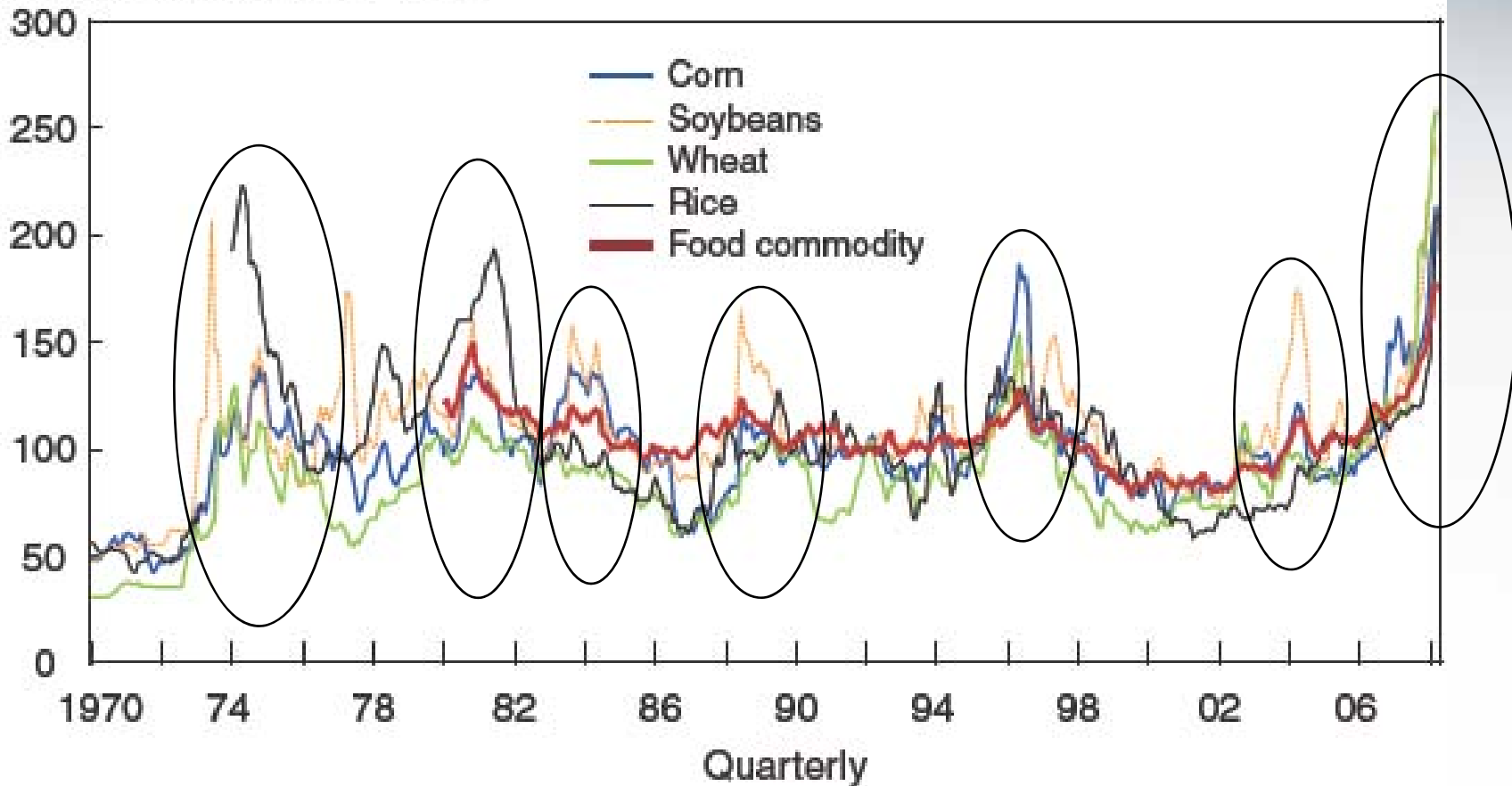
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Food Commodity Price Spikes Since 1970



Index: January 1992 = 100



Source: International Monetary Fund: International Financial Statistics.

Commodity Price Spikes

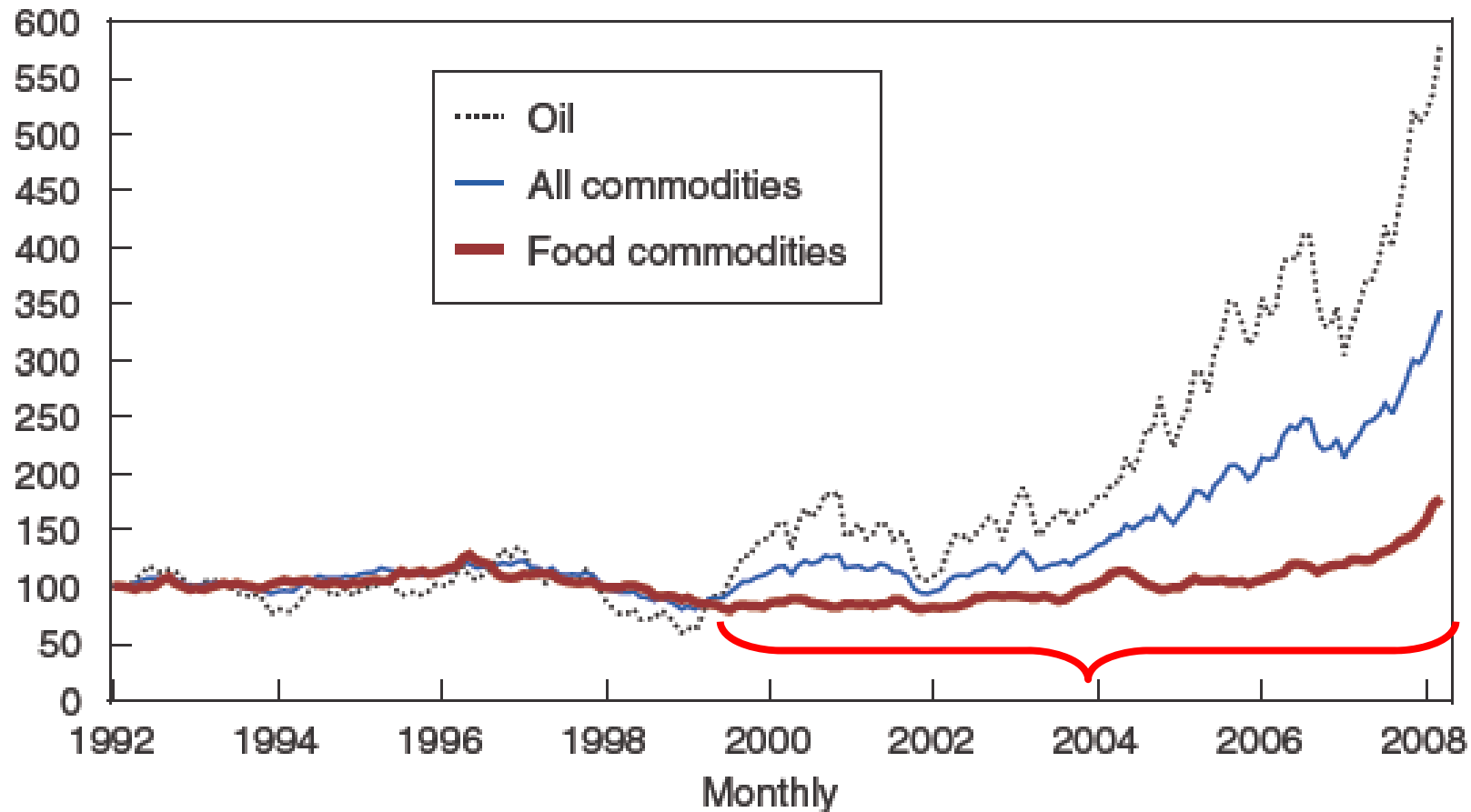


- In 1974
 - Fuel prices rose to their second highest mark
 - Reactionary changes in import and export policies
 - Significant food price inflation occurred.
- According to the Bureau of Labor statistics, when adjusted for inflation,
 - fuel prices are approximately 30% higher today than they were in 1974,
 - but grain prices are about half the price today compared to 1974.

Comparison of Commodities



Index: January 1992 = 100



598%

286%

98%

Source: International Monetary Fund: International Financial Statistics.

Factors Affecting Commodity Prices

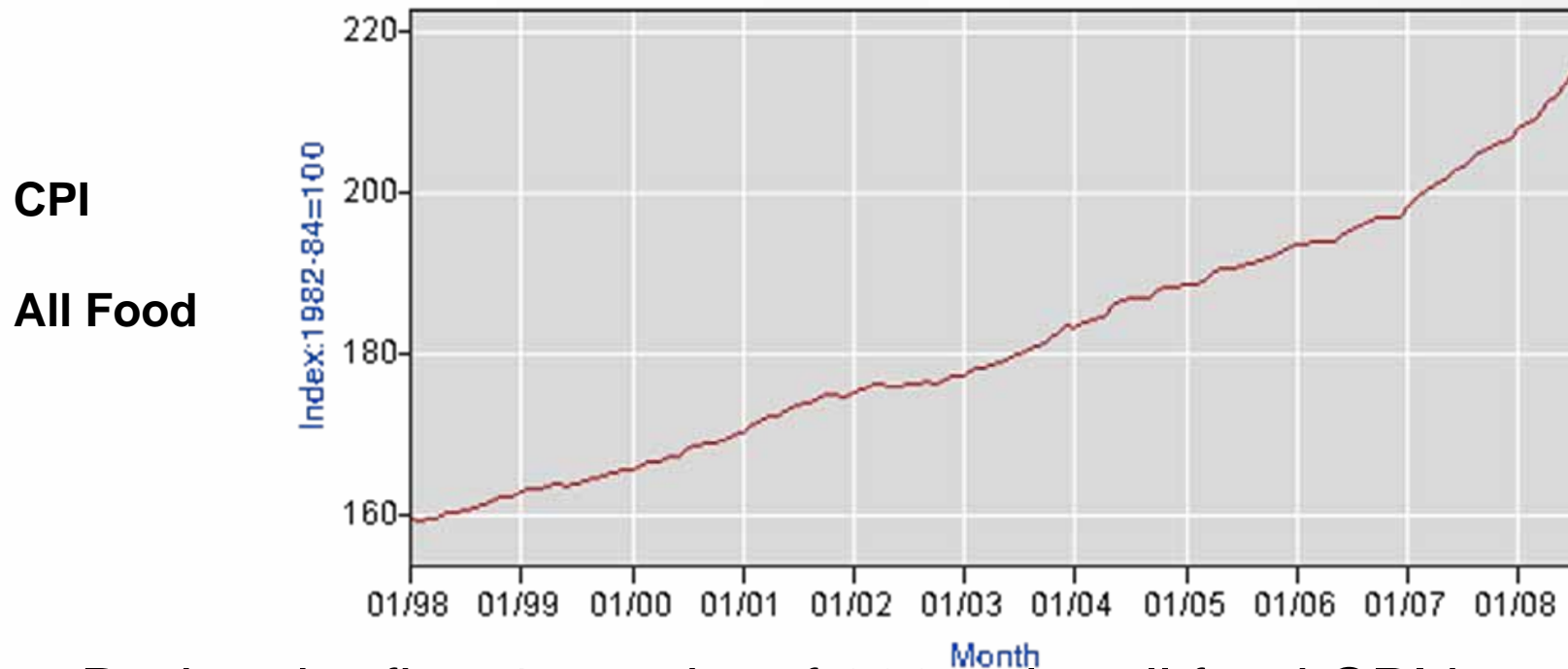


- Increases in the price of crude oil
- Devaluation of the dollar
- Increases in agricultural production costs
- Weather events
- Hedge fund involvement in commodity markets
- Demand for industrial products
- A growing middle class in China and India
- Increasing population
- Reduced agricultural research and development by governmental and international institutions
- Policy responses to rising food prices
- Reductions in government-held grain stocks

Role of Biofuels in Commodity Prices



- In 2007, the expansion in ethanol and biodiesel consumption is estimated to have increased the Consumer Price Index (CPI) for all food by 0.10-0.15 percentage point. In other words, ethanol and biodiesel consumption accounted for approximately 3-4 percent of the overall rise in retail food prices.



- During the first 4 months of 2008, the all food CPI increased by 4.8 percent, with increased ethanol and biodiesel consumption accounting for only about 4-5 percent of the total increase.

Causes of Commodity Price Increases



- DOE and USDA indicate the most significant cause of food price inflation is increased energy prices.
 - Crude oil has risen by 300% in 4 years.
- According to Meryl Lynch and others, without the 8.0 billion gallons of biofuels in the fuel supply, fuel prices would be as much as 15% higher making food prices even higher



Dividing and Conquering Production Agriculture



Food Companies' Profits Soaring



- Kraft Foods

- \$732 Million Quarterly (April-June) Profit
- Raised prices overall by 7 percent



- Sara Lee

- \$242 Million Quarterly Profit
- Net sales increase of 10 percent

Energy Companies' Profits Soaring



- The Record (2nd Quarter 2008) : \$11.68 Billion
- Exxon's Excellent 2007
 - Profit \$40.6 billion
 - Every second of every day: \$1,287 of profit
 - Exxon's 2007 profits of \$40.4 billion, exceed the gross domestic product of 120 countries.
- Chevron's 2007
 - Annual profit of \$18.7 billion in 2007
 - Fourth consecutive year that they made record profits



Biodiesel Companies' Profits are Dismal



- Margins are thin to negative
- In the last year, over 55 biodiesel companies have exited the industry
- Several dozen projects under construction have been scraped or delayed
- At least two plants are for sale before production has started.

Anti Biofuels Campaign

- Led by the Grocery Manufacturers Association
- \$15m PR campaign with Glover Park Group

To: Scott Faber, Grocery Manufacturers Association
From: Glover Park Group
Date: March 6, 2008
Re: Food and Fuel Campaign RFP

Thank you for the opportunity to present this proposal for serv

The unintended consequences of America's current corn-based out for increased focus and attention. Already, independent-m organizations, news media leaders and policy makers are recog threat to the food security of Americans and vulnerable popula

In this environment, a federal agency-level or legislative solutio environmentally and socially untenable ethanol policies now in range of options exist to help alleviate the problem. Examples i legislation eliminating or updating of the biofuels mandate, en tariff and possibly shifting revenue from the blender tax credit programs. At the same time, state governments looking to take in the absence of clear federal leadership (or under the sway of may soon establish undesirable policies, while other states may reforming existing policies.

We therefore have a window – albeit brief – to intervene and cl before the impacts become too great. Our opportunity and too



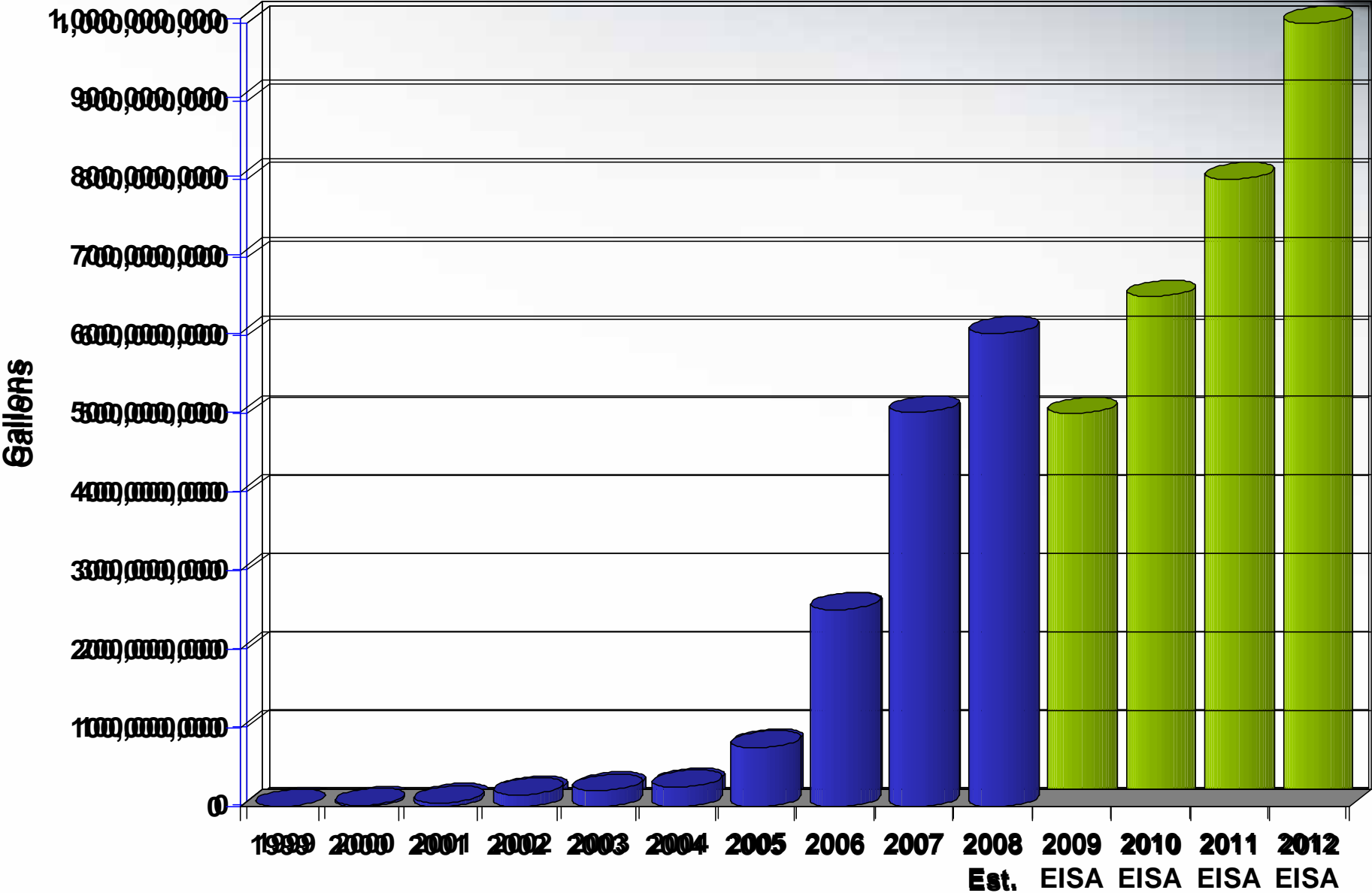
Stated Goal: revisit biofuels policies to contain rising food costs

Unstated goal: divert negative attention about record profits during record prices

Where Do We Go From Here?



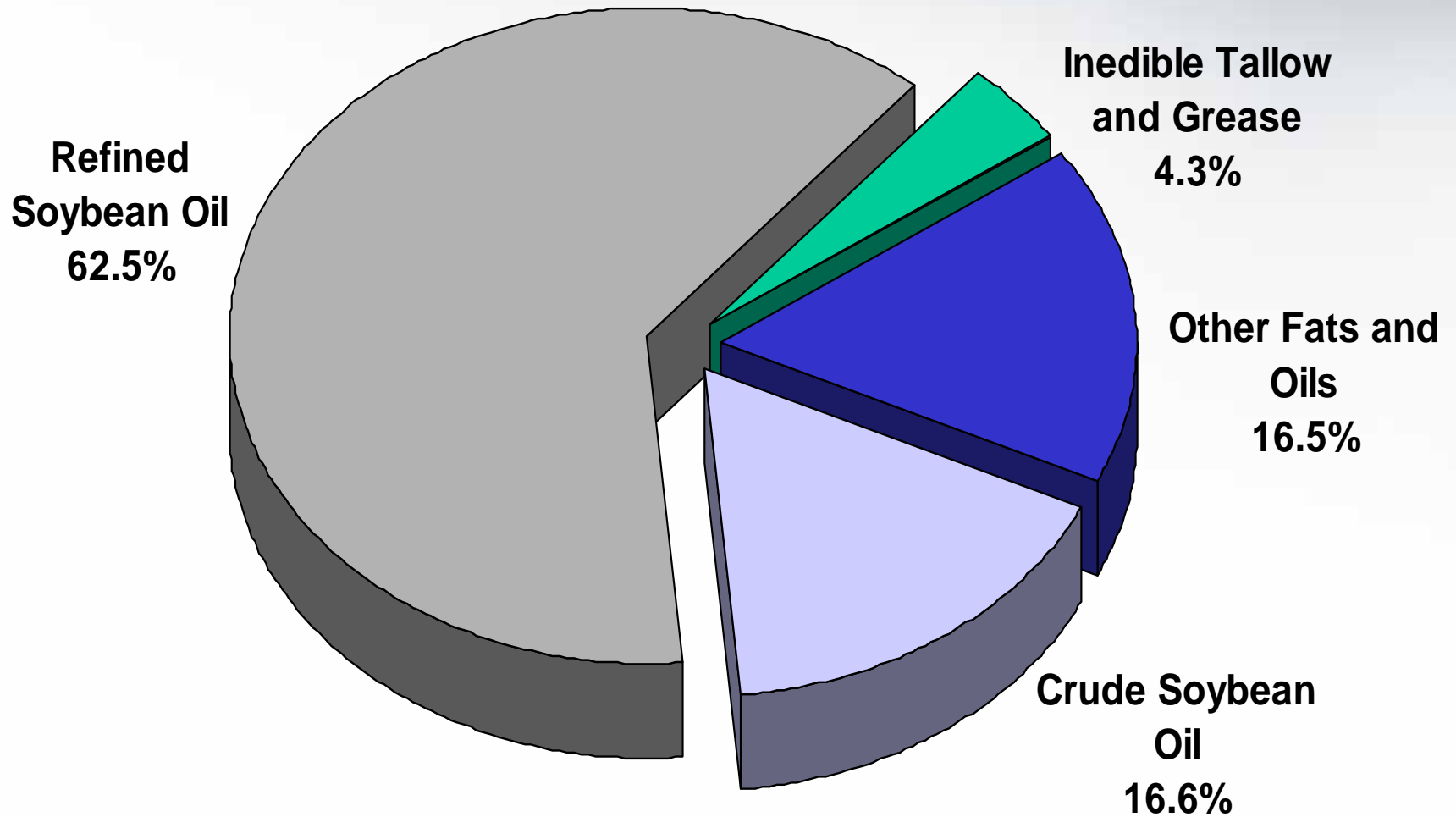
US Biodiesel Demand



Raw Material Use - 2007



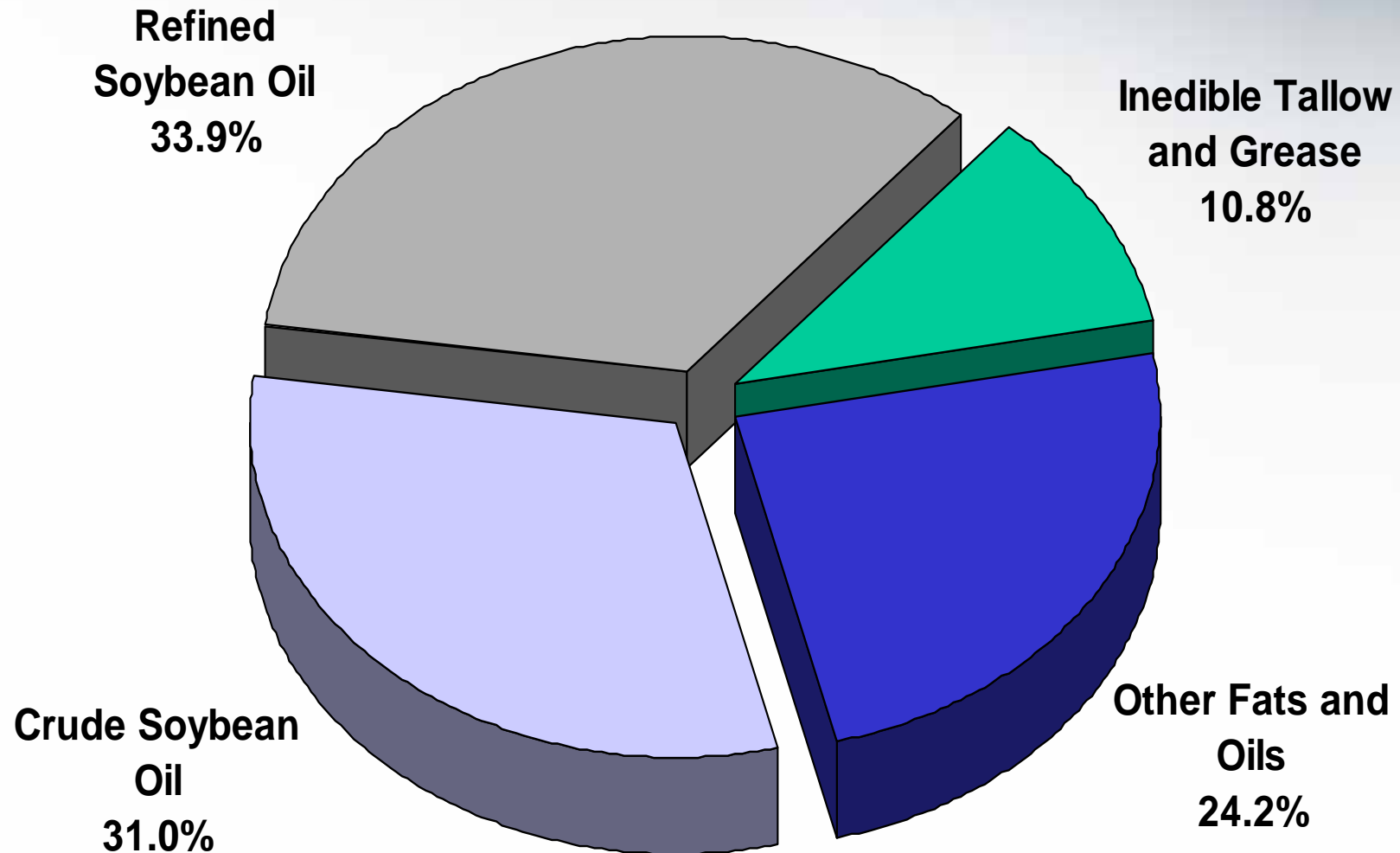
Total Soybean Oil Usage 79.1%



Raw Material Use - 2008



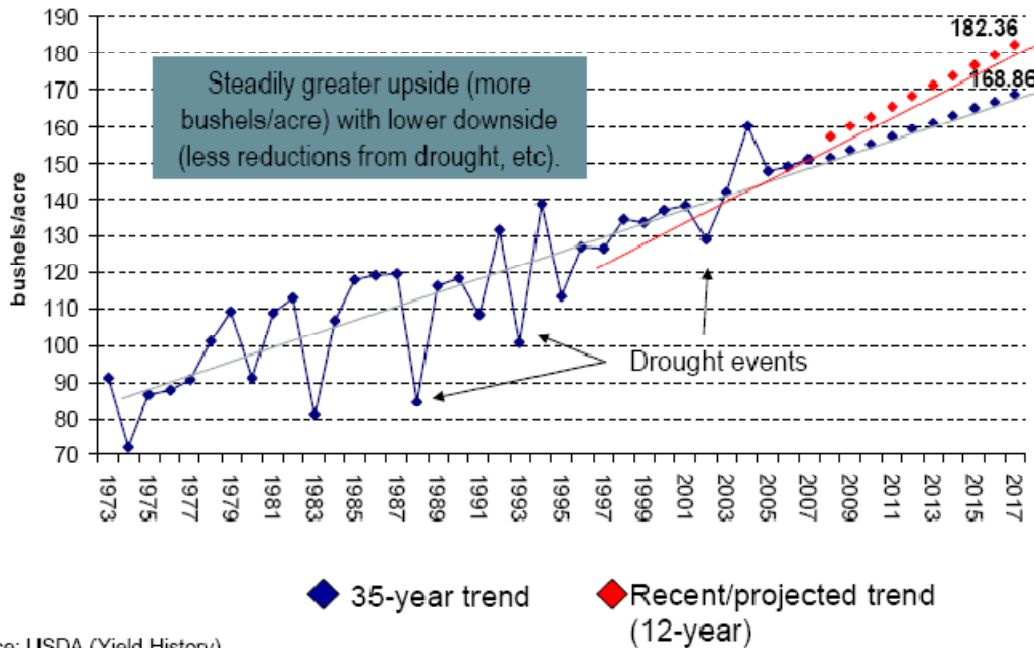
Total Soybean Oil Usage 64.9%



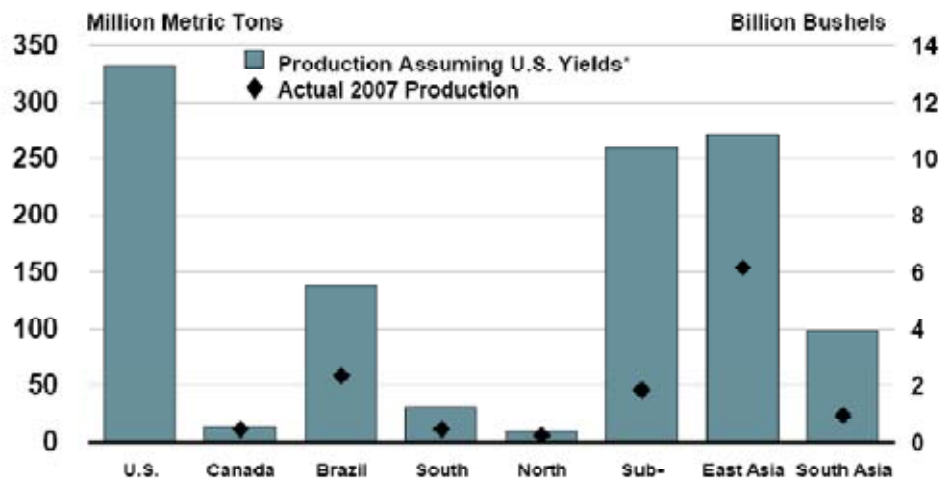
Expanding Feedstock Supplies



U.S. CORN YIELD HISTORY AND TRENDS



Source: USDA (Yield History)



Potential Change From Actual 2007 Production: +11% +139% +164% +45% +460% +76% +317%

*Scenario assumes same area planted in each country but with the ability to achieve U.S. yields.

- Advances in plant breeding science will provide yield increases greater than historical trends lines
- Soy could provide an additional 2 billion gallons of oil by 2015 without adding a single acre and with less inputs

Charts taken from July 10, 2008 Senate Testimony of John Pierce, DuPont Applied Biosciences

Using Existing Land Resources



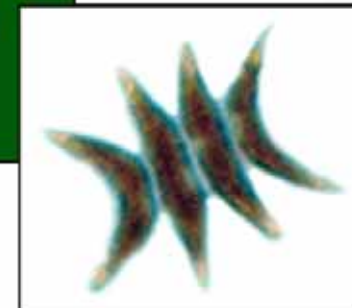
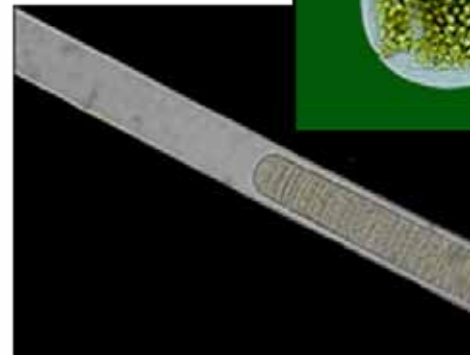
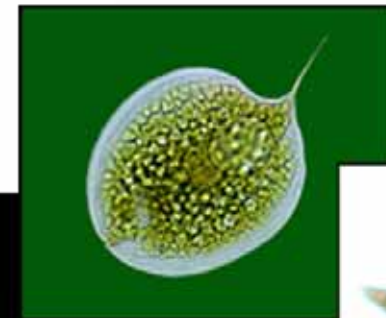
- According to the United Nations Food and Agriculture Organization (FAO), of the land available for agricultural use, only 3.7 billion acres of the 10.4 billion is in production, and of that only 1% is used for biofuels including ethanol.
- Agricultural policies which aim at keeping food and grain prices lower, hamper agricultural development efforts in developing countries and result in less food.

Developing New Feedstock Supplies



There is considerable effort and money going into developing new feedstocks

- Algae
- Camelina
- Municipal Solid Waste
- Seashore Mallow
- Jatropha
- Winter Canola



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