

Importance of the Ethanol Tax Incentive in Driving the Growth of Biofuels

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U.S. Ethanol Program has Three Objectives

- Energy security
- Domestic economic development
- Environmental quality

Major Program Components

- Tax Incentives
 - Volumetric Ethanol Excise Tax Credit (VEETC)
 - Small Ethanol Producer Tax Credit (SEPTC)
 - Cellulosic Biofuel Producer Tax Credit (CBPTC)
- Offsetting tariff on Imported Ethanol
- Renewable Fuel Standard
- *Each component works together to help achieve one or more program objective*

VEETC and Ethanol Blends Save Consumers Money!

| Assumptions | Jan-Mar 2010 | | |
|---|----------------------------------|---------------------------|---------------------------|
| Conv Reg Gasoline, Rack (cpg) | 208.4 | | |
| RBOB, NYH (cpg) | 203.7 | | |
| Ethanol, IA Spot (cpg) | 165.4 | | |
| Ethanol transportation to NYH (cpg) | 10.0 | | |
| VEETC (cpg) | 45.0 | | |
| Net Ethanol Price (cpg) | 120.4 | | |
| | Regular Gas (cts/gal) | E-10 (cts/gal) | E-15 (cts/gal) |
| Rack | 208.4 | 196.4 | 192.7 |
| DTW | 214.0 | 201.0 | 198.3 |
| Retail Price (less tax) | 220.2 | 208.2 | 204.5 |
| Average Federal & State Tax | 47.7 | 47.7 | 47.7 |
| Retail Pump Price | 267.9 | 255.9 | 252.2 |
| Savings | | 12.0 | 15.7 |
| Percent | | 4.5% | 5.9% |
| Annualized Consumer Savings (Mil \$) | | \$15,391 | \$20,071 |

Source: EIA/USDA

**Average wholesale margin 5.6 cpg; retail margin 6.2 cpg, Fed tax 18.4 cpg; State tax 29.3 cpg*



The Ethanol Program has Critics

- Critics argue that an excise tax credit for ethanol is unnecessary when a mandate requiring refiners to blend ethanol already exists.

RFS versus VEETC

RFS

- Requires volume of ethanol blended to increase from 10.9 bg in 2009 to 31 bg by 2022
- Ethanol from corn starch capped at 15 bil gal in 2015
- Future growth from cellulose

VEETC

- 45 cpg tax credit claimed by the refiner/blender
- Enhances cost competitiveness of ethanol with gasoline
- Provides economic incentive to blend ethanol with gasoline
- Expires Dec 31, 2010

Programs are Interdependent and Complementary

- RFS mandates the use of ethanol, not the production
- VEETC's market-based structure encourages and incentivizes domestic production and ensures that the RFS volume requirements will be filled primarily with homegrown supply

Ethanol Industry shined brightly in a recession year

- \$16 billion was spent on raw materials, other inputs, goods and services in 2009
- An additional \$1.7 billion was spent to transport grain, other inputs, ethanol and DDG
- Nearly 3.8 billion bushels of corn were used, valued at \$13.3 billion

Ethanol Industry Helped a Struggling Economy

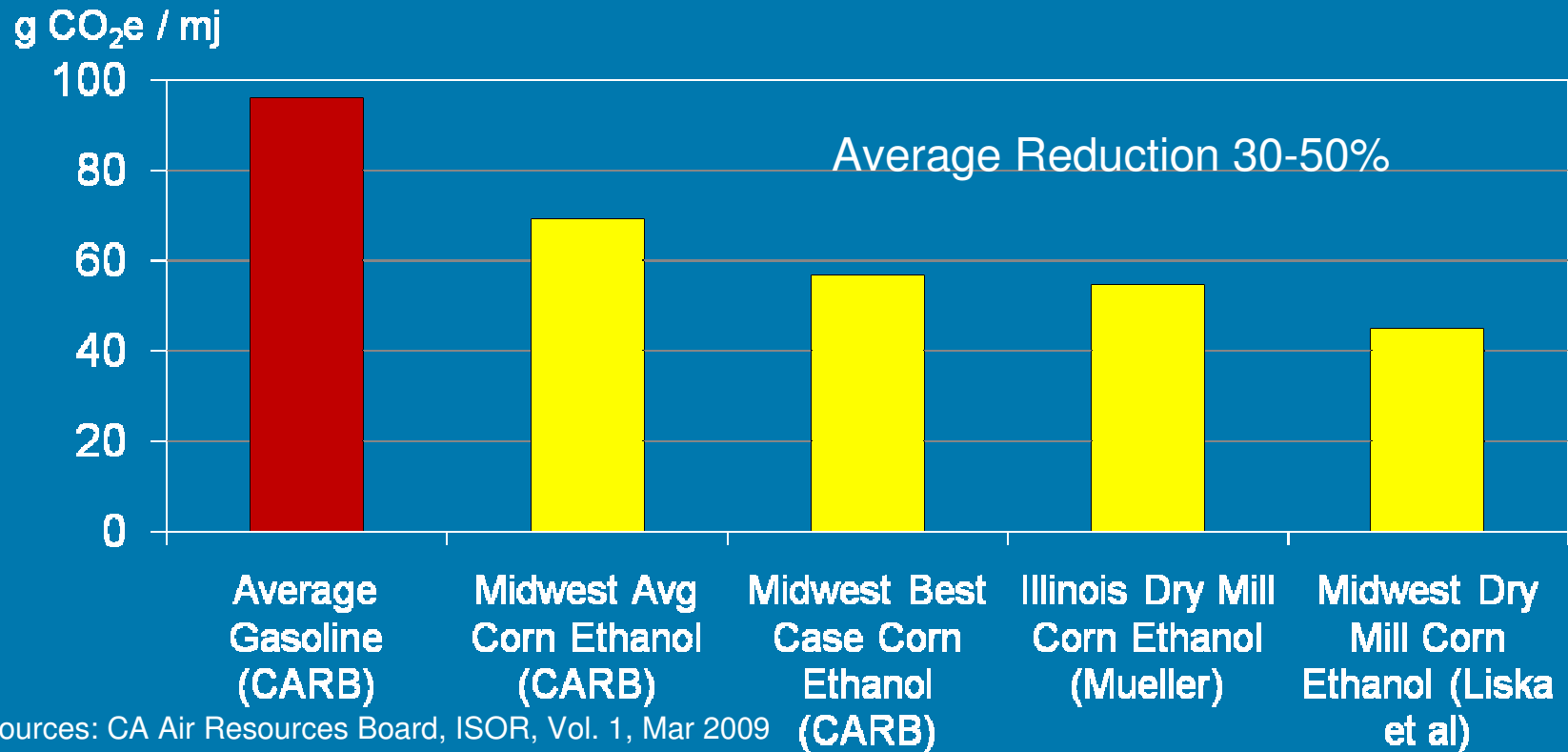
- Full impact of spending added \$53.3 billion to the nation's GDP
 - 3% of value added by entire manufacturing sector
- Supported nearly 400,000 jobs throughout entire economy.
- Put \$16 billion into the pockets of American households
- Rural economies benefit the most

Ethanol Tax Incentives Pay for Themselves!

- Industry generates \$8.4 billion in Federal revenue and \$7.5 billion for State and Local governments
- VEETC and SEPTC cost \$5.0 billion
- ***Ethanol provides a \$3.4 billion surplus for the Federal Treasury.***

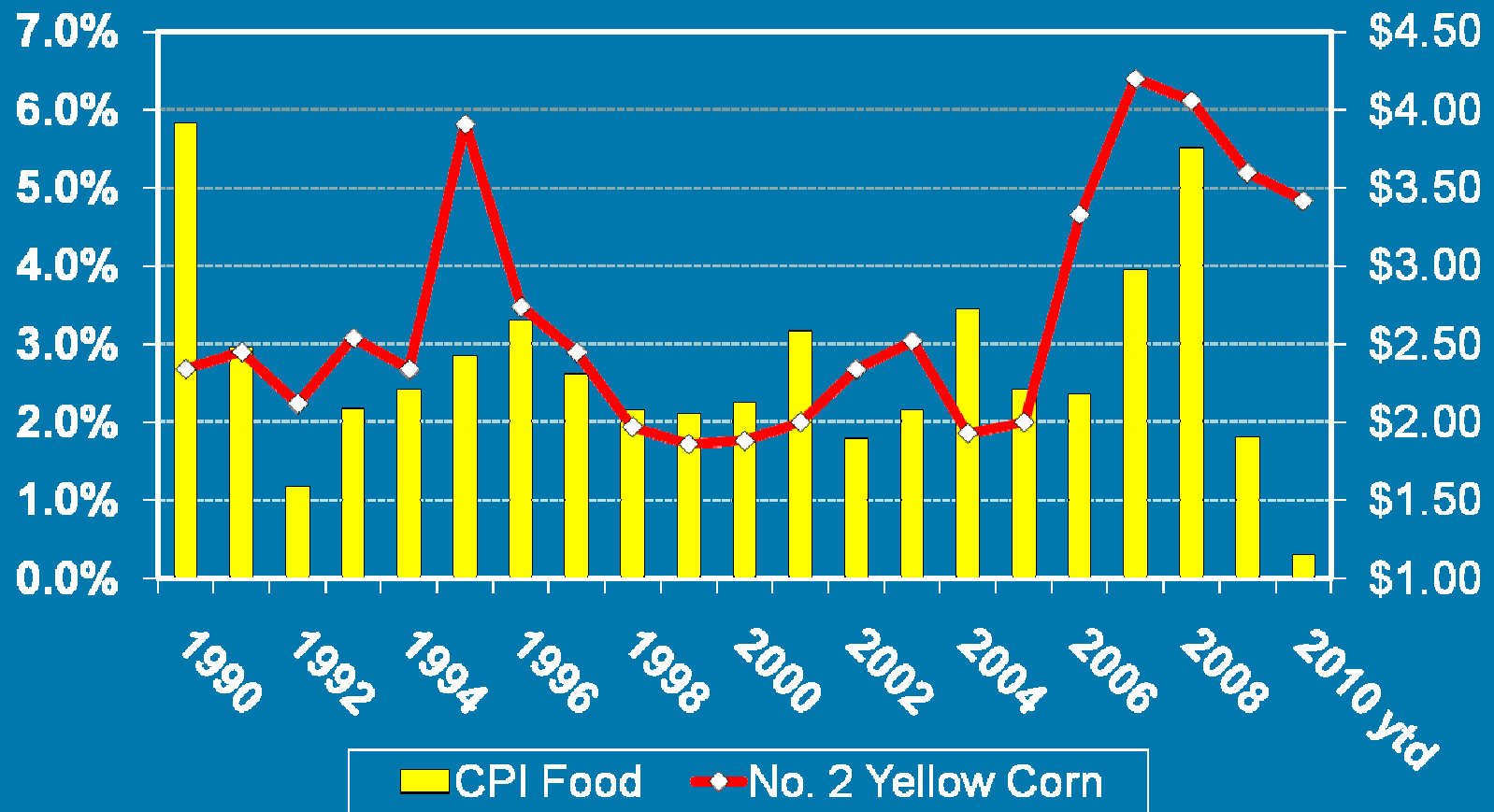
Corn Ethanol Reduces Direct GHG Emissions

Corn Ethanol GHGs vs. Average Gasoline



Sources: CA Air Resources Board, ISOR, Vol. 1, Mar 2009
Mueller et. al "The Global Warming and Land Use Impact of Corn Ethanol at the Illinois River Energy Center" Oct 2008
Liska et al "Improvements in Life Cycle Energy efficiency and Greenhouse Gas Emissions of Corn Ethanol" Journal of Industrial Ecology, Jan 2009

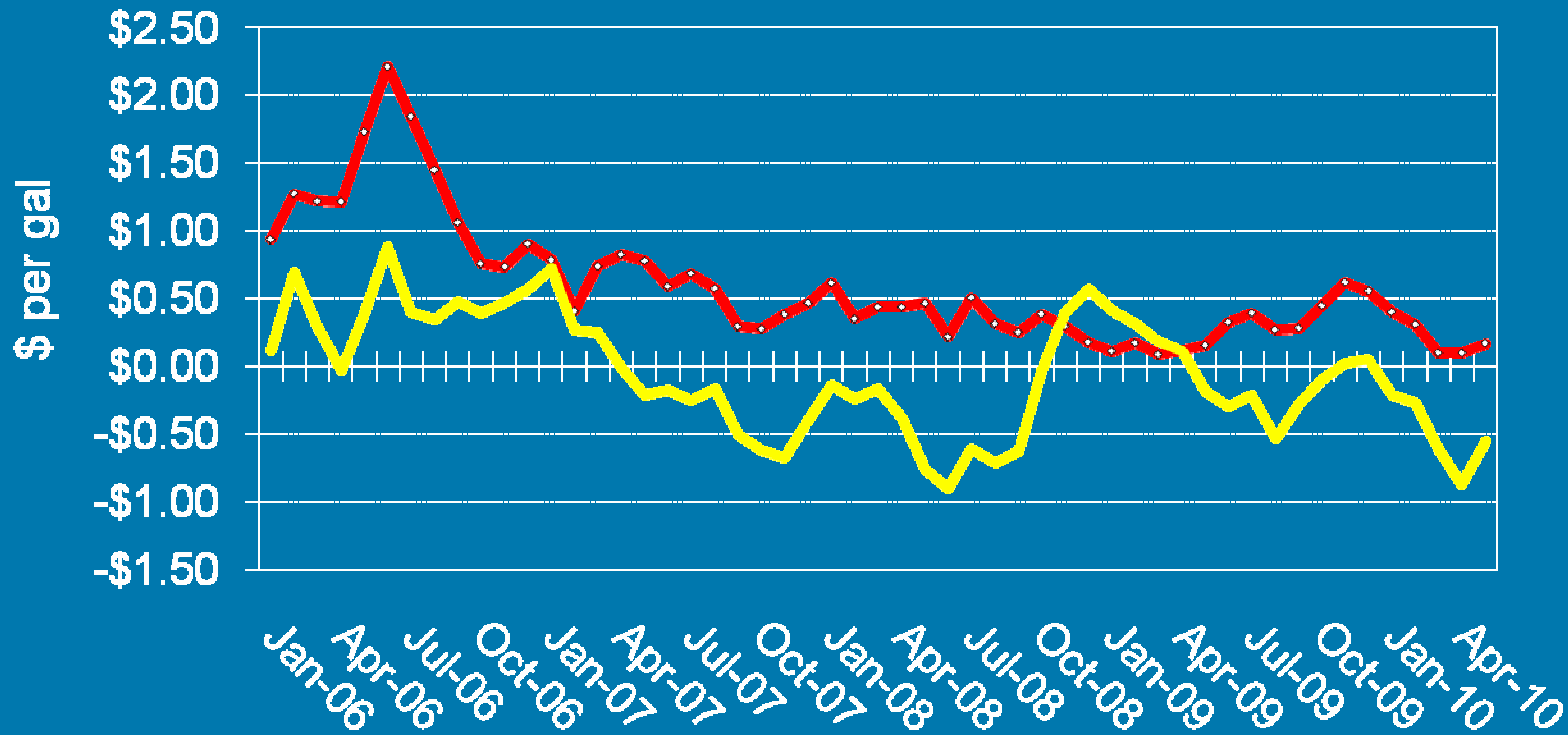
Ethanol has not fueled food prices!



Initial Impacts of Eliminating the VEETC

- Sharply lower U.S. ethanol market prices
- Weakened industry profitability
- Significantly reduced domestic ethanol production

Industry Profitability Tracks the Gasoline-Ethanol Spread



Ag Marketing Resource
Center, ISU; EIA

—●— Returns over VC — RBOB-EtOH Spread

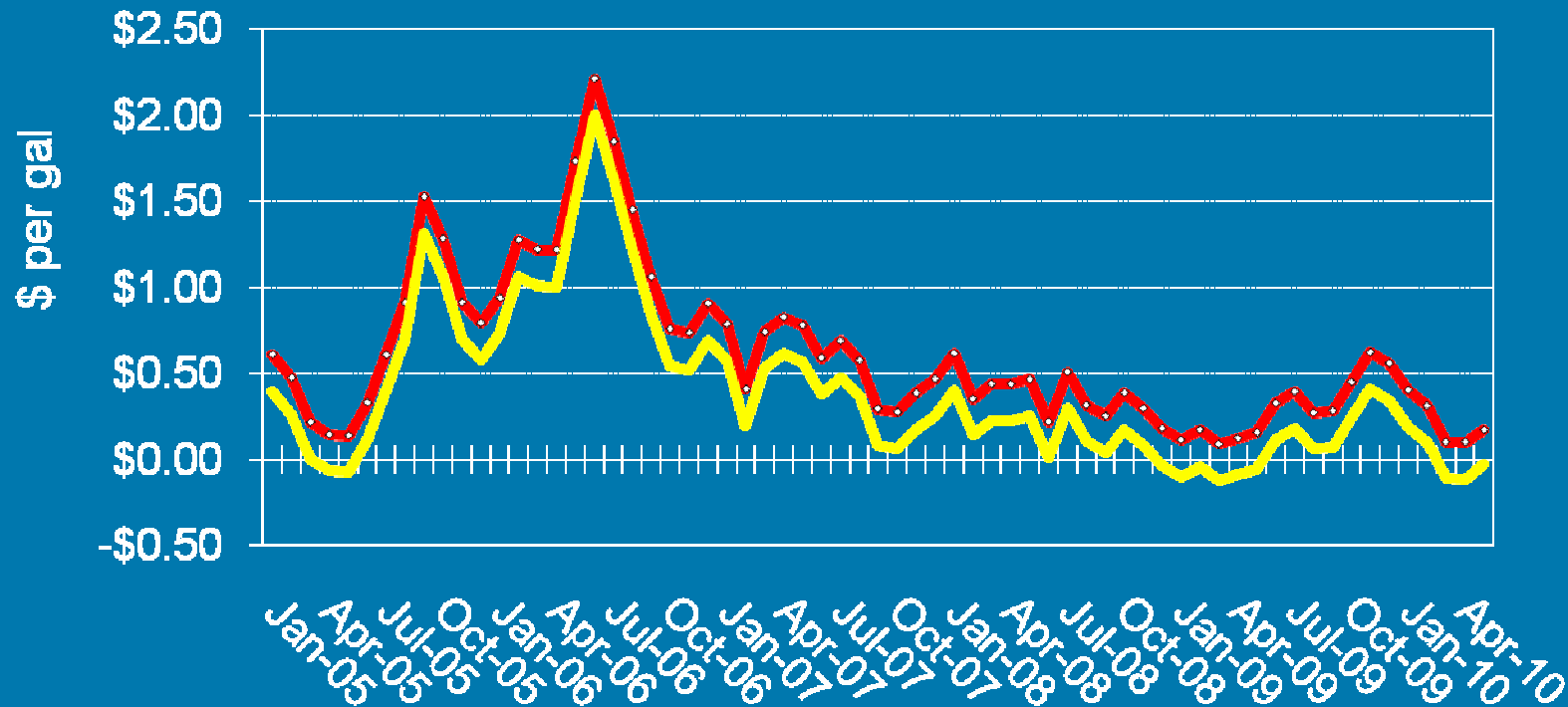


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Industry Profitability has been Trending Down

Net Returns for Iowa Dry Mill Ethanol Producers



Ag Marketing Resource Center
Iowa State Univ.

Variable Costs Total Costs

Impact of Removing VEETC on Ethanol Prices: 2009

| | |
|--|---------------|
| Base Ethanol Price (FOB NE Plant, cts/gal) | 164.0 |
| VEETC (cts/gal) | 45.0 |
| Net Ethanol Price (cts.gal) | 119.0 |
| Percent Change | -27.4% |
| Ethanol Demand Elasticity | -0.43 |
| Potential Change in Ethanol Demand | 11.8% |
| Ethanol Supply Elasticity | 1.375 |
| Potential Change in Ethanol Production | -37.7% |
| Price Elasticity of Ethanol Supply | -0.13 |
| Increase in Price from Reduced Production | 4.9% |
| Net Change in Ethanol Price | -22.5% |
| Ethanol Price after VEETC Removal (cts/gal) | 127.0 |

Removing VEETC will Devastate Profitability

| | Avg Jan-May 2010 | Without Tax Credit | % Change |
|----------------------------|---------------------|-----------------------|---------------|
| Corn Price (\$/gal) | \$3.47 | \$3.19 | -8.0% |
| Revenue/gal | | | |
| Ethanol | \$1.59 | \$1.23 | -22.5% |
| DDG | \$0.32 | \$0.33 | 3.6% |
| Total Rev/gal | \$1.91 | \$1.56 | -18.1% |
| Cost/gal | | | |
| Corn | \$1.24 | \$1.14 | -8.0% |
| Other Var. | \$0.42 | \$0.42 | -- |
| Total Cost/Gal | \$1.66 | \$1.56 | -6.0% |
| Net Return | \$0.25 | \$0.00 | -98.6% |

Source: Ag Decision Maker, D1-10 Ethanol Profitability. May 2010. Iowa State University. Projection by JMUrbanchuk, ENTRIX

Removing VEETC will have Adverse Economic Consequences

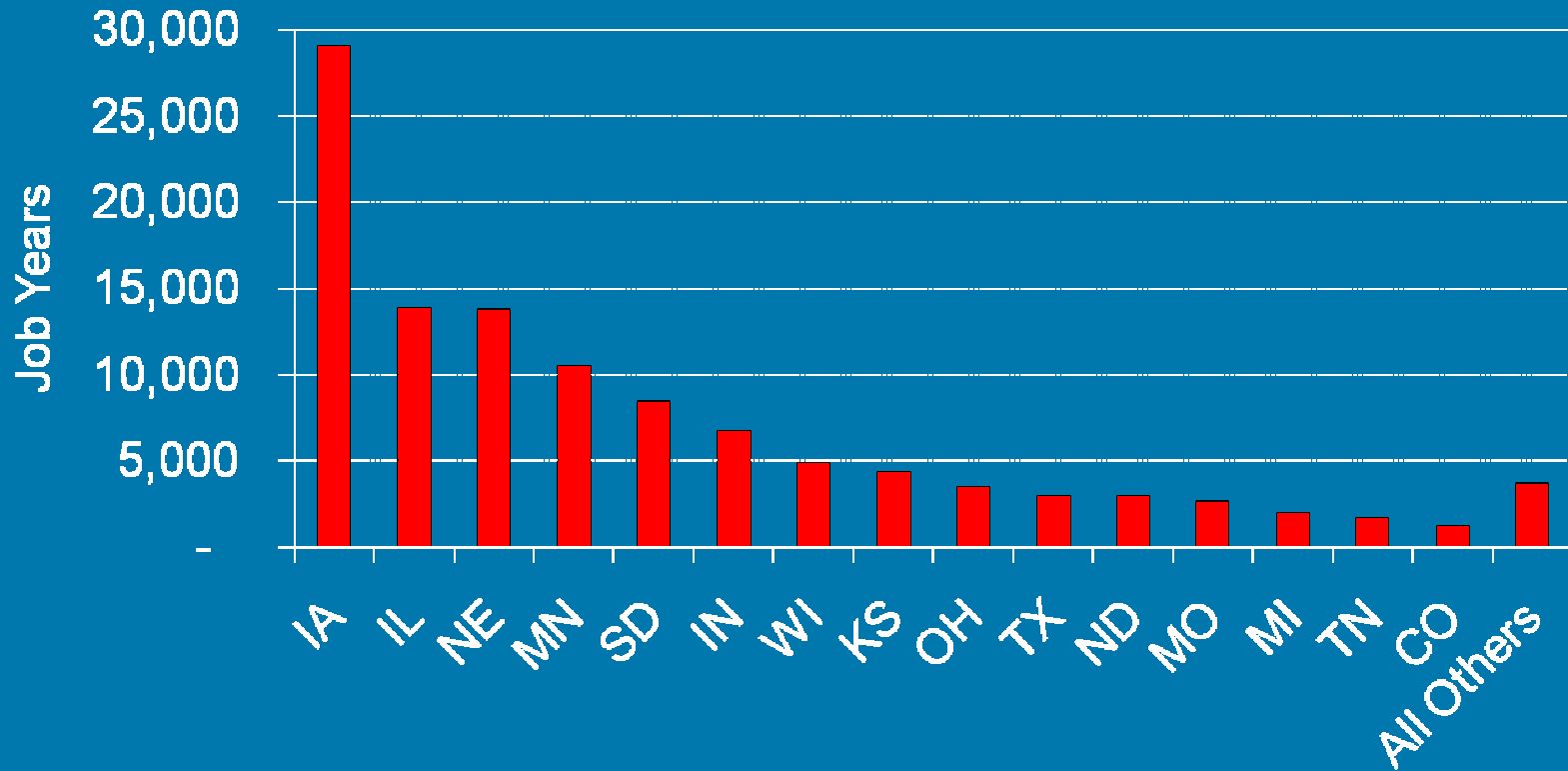
- Reducing ethanol production 38% represents the loss of 4 billion gallons of output
 - Size of industry in 2005
 - Equivalent to 60 average sized plants
- Industry would spend \$6.6 billion less on purchases of grain and other raw materials, good and services

Economy-wide Losses from Removing VEETC

- Reduce aggregate GDP by \$16.9 billion (2009 dollars)
- Result in the loss of more than 112,000 jobs in all sectors of the economy
- Reduce household income by \$4.2 billion (2009 dollars)
- Force consumers to spend as much as \$5.5 billion more for gasoline annually
- Cut State and local tax revenue by \$2.7 billion and Federal tax revenue by \$2.4 billion

The Biggest Ethanol Producing States will Suffer the Largest Job Losses

Total Employment Impact of Losing VEETC



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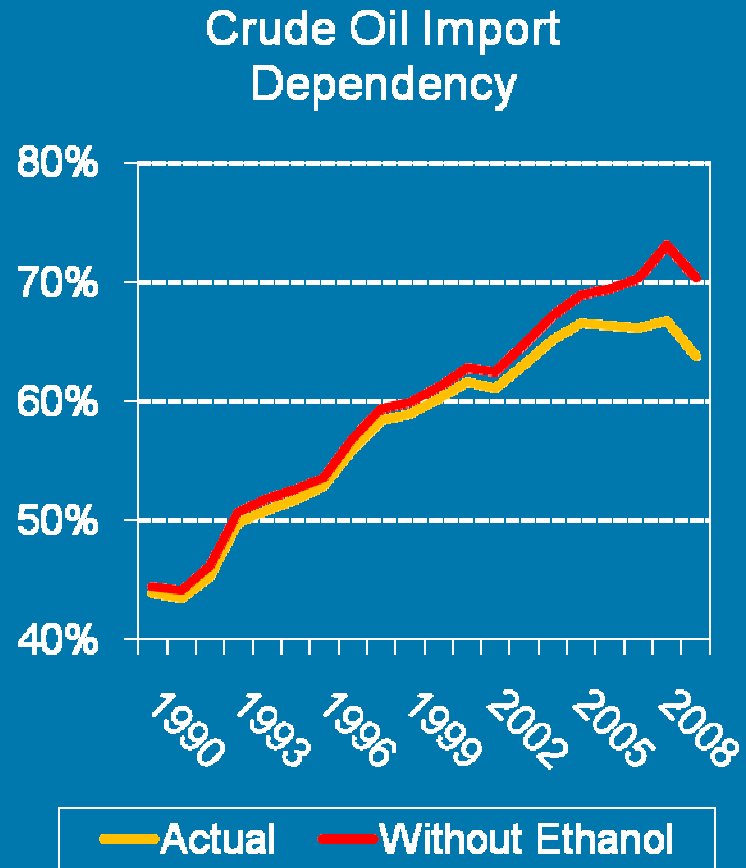
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Removing the VEETC will Benefit Foreign Producers

- The U.S. tax credit is accompanied by an import tariff that prevents taxpayer dollars from being paid to foreign producers.
- We expect the import tariff also would be eliminated.
- This would provide a significant incentive for foreign ethanol producers such as Brazil, India, and China to increase exports to the U.S.
- Elimination of both the VEETC and tariff will have an unintended adverse impact on CBI countries

Removing VEETC will Sacrifice Energy Security

- Removing the VEETC will result in the replacement of domestic ethanol production with imports.
- Instead of reducing dependence on imported energy, the U.S. will be increasing dependence for a different fuel from different supplying countries.



Development of Cellulosic Ethanol will be Affected

- Removing the VEETC will send an unintended message to the investment community that the U.S. is not serious about supporting the development and growth of the biofuels industry.
- Would raise questions among investors about the potential longevity of the cellulosic tax credit thereby increasing risk for lenders and investors.
- Increased risk is likely to impede the vital flow of capital for investment and development of this component of the biofuels industry

In Conclusion

- The ethanol tax credit has played a vital role in the expansion of the U.S. ethanol industry.
- Removal of the tax credit would ultimately reduce the market price of ethanol and seriously affect the profitability of producing ethanol in the U.S.
- Removing the tax credit will encourage the exportation of another U.S. industry and result in the loss of the economic benefits provided by the ethanol industry in terms of jobs, income, and tax revenue.