How the Ethanol Industry Impacts the U.S. Economy

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The U.S. ethanol industry has grown significantly.
... and will continue to grow
But there are challenges facing the ethanol industry.

- The EPA approval of E15 is only a start and may create more problems than it solves.
- Reauthorization of the ethanol tax incentives and import tariff.
- The impact of high feedstock prices on profitability.
- Ability to finance new investment.
- Import competition.
The blend wall is forestalled for the time being. EPA approved 15% ethanol blends for auto models 2007 and later.

- Gasoline demand is expected to average 132 billion gallons between 2010 and 2022.
- 10.8 billion gals were produced in 2009; 2010 YTD output is up 27%.
- Current nameplate capacity is 13.8 billion gal; 840 mil gal is under construction.
- The E-15 market will expand as the number of eligible autos grows.
Industry profitability has been essentially flat for nearly 3 years.

Ag Marketing Resource Center
Iowa State Univ. 10/04/2010
Rising corn prices reflect smaller supplies as well as higher demand for feed, exports and ethanol.
Corn prices have shifted upward as ethanol expands.
Where does the economic impact come from? Econ 101
Ethanol Industry shined brightly in a recession year and shines even brighter in a weak recovery.

- $16 billion was spent on raw materials, other inputs, goods and services last year. 2010 spending is estimated at $20 billion.

- An additional $2 billion is being spent to transport grain, other inputs, ethanol and DDG.

- This year about 4.6 billion bushels of corn will be used to make ethanol, valued at nearly $17 billion.
Ethanol is a vibrant manufacturing sector industry!

- Spending on goods and services for construction and annual operations.
  - Every dollar spent represents the purchase of final demand from other (supplying) industries.
  - These dollars circulate through the economy several times.
  - The effects are measured by applying industry-specific economic impact multipliers to expenditures.
The combination of direct spending and the indirect impacts of those dollars circulating throughout the economy will:

- Add more than $60 billion to the U.S. economy in 2010.
- Put an additional $18 billion in the pockets of American.
- Support more than 400,000 jobs in all sectors of the economy.
- Generate $5.4 billion in new federal tax revenue, and $5.7 billion for state and local governments.

- The tax credits will cost about $6 billion in federal outlays this year.
Corn ethanol has a positive environmental impact by reducing direct GHG emissions.

Sources:
- CA Air Resources Board, ISOR, Vol. 1, Mar 2009
Ethanol also provides substantial energy security benefits.

- The production of 13 billion gallons of ethanol will displace 422 million barrels of crude oil this year.

- This displacement will reduce the outflow of dollars largely to foreign oil producers by $34.4 billion. These dollars will remain in the U.S. and will help finance the capital expansion.
Remember the food versus fuel controversy?
Turned out to be much ado about nothing

Source: BLS, RFA
Inflation? We don’t got no stinking inflation!

- There is little evidence of inflation in the U.S. economy.
- “Core” inflation continues to decline prompting fears of deflation.
- The Fed is considering inflation as a strategy to stimulate the economy!
- Consumer food prices are recovering from the sharp plunge following the 2008 commodity bubble and the trend is up.
But, is the same thing happening again?

- Increasing ethanol production and recent EPA approval of E15 are again stirring food inflation fears.
- U.S. and global food prices are recovering but not to 2008 levels.
- Major reason for increases is “short” 2010 crops.
  - 31% decline in Russian wheat
  - 3.4% decline in U.S. corn
  - 5.3% drop in BZ & AR soybeans
Oil drove consumer food prices in 2008, current relationship is less clear.

Source: BLS; EIA
Why the fears? Crop prices have increased but not to near 2008 levels, livestock prices have.

[Crop market prices graph]

[Crop market prices graph with blue line for corn and red line for soybeans]

[Wholesale livestock prices graph]

[Wholesale livestock prices graph with blue line for cattle, green line for broilers, and red line for hogs]
Agricultural commodities are the basis for consumer foods but their impact on retail prices is overshadowed by other factors.

- Corn, wheat, and soybean prices will continue to be affected by area planted and yields, which determine production.
- The largest impact from grain and oilseed prices is through meat, dairy, poultry and eggs. Prices for these products will lag changes in crops due to a longer production cycle.
- Consumers will remain vulnerable to changes in non-commodity prices, notably energy and fuel.
- Macroeconomic policy and consumer expectations regarding inflation also will affect the ability of marketers to pass along higher costs.
In conclusion …

- Ethanol production will continue to expand but significant challenges remain.
- Ethanol is a shining star within a declining U.S. manufacturing sector and will provide significant economic, environmental, and energy security benefits.
- Commodity prices will remain vulnerable to the influence of speculators as was the case in 2008. However high prices stimulate production and tend to be self-correcting.
- The “food versus fuel” issue is a straw man argument. We can have both.
Take away … Biofuels aren’t new, only the vehicle in which they are used is