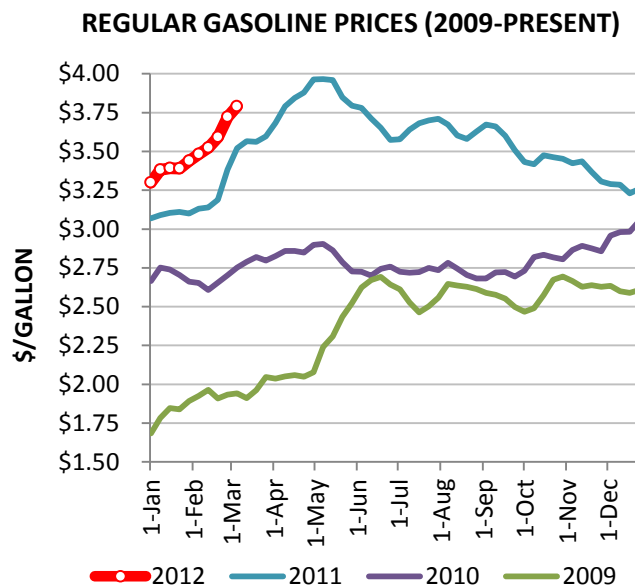


March 6, 2012

ETHANOL'S ROLE IN REDUCING GASOLINE PRICES

Retail gasoline prices are again on the rise, recently reaching their highest level since May 2011. The national average retail price for regular grade gasoline hit \$3.79/gallon last week, \$0.27/gallon higher than at the same time last year and \$1.04/gallon higher than the same week in 2010.¹ Prices along the coasts are even higher, with California drivers paying an average of \$4.36/gallon and New Yorkers spending \$3.96/gallon for regular gasoline. As gas prices typically ramp up in April and May, many analysts are concerned that today's high gas prices will spiral even higher in the coming months. Experts predict drivers in some parts of the country may be **paying as much as \$5/gallon by Memorial Day.**²



The recent run-up in fuel prices is occurring even as gasoline demand has fallen to its lowest point in more than a decade. Tensions in Iran and Syria have prompted speculative investors to raise their stakes in the oil market, which has translated to higher crude oil prices. Nearby crude oil futures hit \$109.77/barrel on February 24, the highest price since early May 2011. These higher crude oil prices, along with refinery closures in the eastern United States, have sparked higher gasoline prices from coast to coast. Noted officials and economists, including Federal Reserve Chairman Ben Bernanke, have recently warned that the surge in oil and gasoline prices significantly threatens the nation's budding economic recovery.³

THE ROLE OF ETHANOL

While recent gasoline prices have been the highest ever for this time of year, they would unquestionably be even higher without the enormous contribution of ethanol. American-produced ethanol now constitutes 10% of our nation's gasoline supply, and it is the only energy source available today that can meaningfully keep gasoline prices in check. In a 2011 paper published by the Center for Agriculture and Rural Development (CARD), economists from Iowa State University and the University of Wisconsin found that the use of more than 13 billion gallons of ethanol **reduced gasoline prices by an average of \$0.89/gallon in 2010.**⁴ That means the average American household **spent \$800 less on gasoline** than would have otherwise been the case without ethanol. The researchers also found that for the first decade of the 21st century, growth in ethanol production and use helped keep gasoline prices cheaper by an average of \$0.25/gallon. As such, American drivers saved an **average of \$35 billion** annually on gasoline purchases from 2000 to 2010.

¹ Energy Information Administration. Gasoline and Diesel Fuel Update. <http://www.eia.gov/petroleum/gasdiesel/>

² See, for example, C. Krauss. "Tensions Raise Specter of Gas at \$5 a Gallon." New York Times. Feb. 29, 2012.

³ See <http://thehill.com/blogs/e2-wire/e2-wire/213375-bernanke-policy-makers-have-few-short-term-options-to-lower-gas-prices>

⁴ Available at: http://ageconsearch.umn.edu/bitstream/103916/2/11-WP_523.Du-Hayes.pdf

HOW DOES ETHANOL REDUCE GAS PRICES?

Ethanol is cheaper than gasoline at the wholesale level: A gallon of ethanol is currently selling for nearly \$1 per gallon less than a gallon of gasoline. That means a gallon of E10 (gasoline containing 10% ethanol) is \$0.10/gallon cheaper than a gallon of conventional gasoline with no ethanol. If E15 (gasoline with 15% ethanol) blends were available today, they likely would be selling at an even larger discount to conventional gasoline.⁵

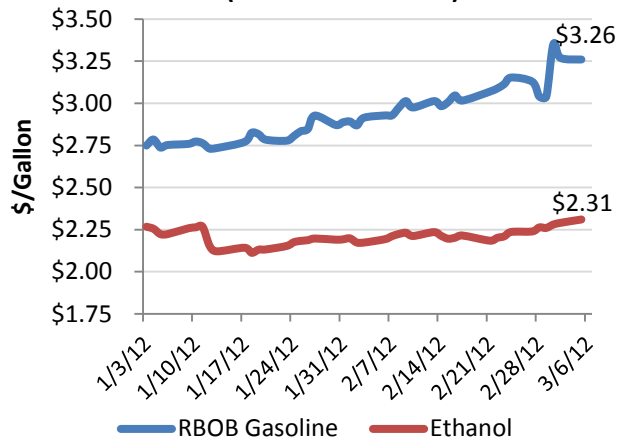
Increased ethanol use reduces oil demand and prices: Since 2005, the year in which the Renewable Fuel Standard (RFS) was first enacted, America's oil demand has decreased and national oil import dependence has fallen from 60% to 45%. Meanwhile, ethanol has grown from 1% of the nation's gasoline supply to 10% today. As the world's largest oil consumer, extending our oil supply with renewable fuels helps put downward pressure on petroleum prices and keeps them lower than they would be otherwise (this is the effect primarily responsible for the \$0.89/gallon savings found by the aforementioned CARD analysis).

Ethanol provides gasoline refiners with a cost-effective source of octane: With an octane rating of 113 (RON), ethanol has considerable value to refiners as a source of octane. Oil refiners and blenders use ethanol to upgrade otherwise unmarketable lower octane sources of gasoline (called sub-octane) to the octane levels required by state law for sale into commerce. Upgrading sub-octane gasoline with ethanol reduces the refiner's cost of producing gasoline. If low-cost ethanol were not available to refiners, octane demand would have to be met with other higher-cost sources, many of which are toxic in nature.

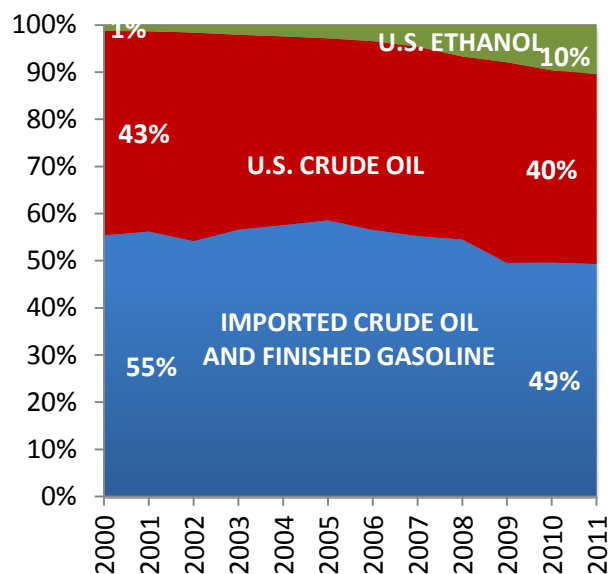
THE BOTTOM LINE

The factors driving gasoline prices higher are complex and not always transparent. However, there can be no argument that ethanol is playing a significant role in holding gasoline prices lower than they would be otherwise. It will take a host of solutions to divorce America's economic future from the vagaries of the world oil market, but ethanol is providing one part of the answer today and can be an even larger part of the solution in the years and decades to come.

RBOB GASOLINE AND ETHANOL PRICES
(NEARBY FUTURES)



WHERE DOES OUR GAS COME FROM?



⁵ EPA approved the use of E15 in model year 2001 and newer vehicles in 2011. However, other federal and state regulatory requirements and marketplace adjustments must be achieved before E15 will be broadly available.