Ferguson: Energy Matters

April 27, 2007

California Gasoline – It's the Price, Stupid

A curious article about gasoline consumption in California recently appeared in my local newspaper. Data released for 2006 showed that gasoline consumption declined slightly last year. The article whined that consumers were not "rewarded" with lower prices. I'm not an economist, but even an amateur like me is able to understand that lower consumption is related to higher—not lower—prices.

As a political consultant might say about gasoline consumption, "It's the price, stupid!"

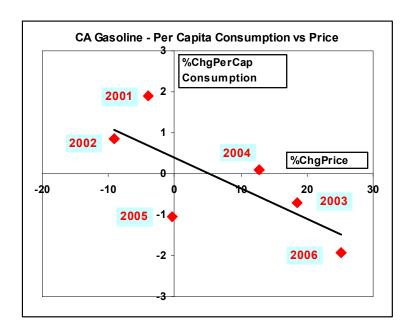
The article also ignored the fact that California's population grew again last year, as usual. To see how consumers react to prices, per capita consumption is probably a better measure than total consumption.

As a numbers junkie, I was forced to take matters into my own computer.

According to the California Energy Commission, the average price of gasoline in the state last year was \$2.81 per gallon, an increase of 25 percent over 2005 when adjusted for inflation.

Taxable sales of gasoline reported by the Board of Equalization divided by population shows that per capita consumption was 423 gallons per man, woman, and child, a decrease of 1.9 percent from 2005. (Burning that much gasoline produces more than 8,000 pounds of carbon dioxide. Multiply by California's 37+ million people . . . Small wonder the planet is warming.)

Looking back over the years since 2000, the relationship between the change in gasoline prices and the change in per capita consumption has been fairly consistent. When the price increases by 13 percent, consumption falls by about 1 percent, as shown in the chart below.



The hurricanes in 2004 may explain why per capita consumption dropped in 2005 despite little change in price. I'm at a loss to explain why per capita consumption grew 2 percent in 2001 with only a small decrease in price.

The relationship between consumption and prices shown in the chart should concern politicians worrying about global warming and energy "independence." The most effective way to reduce gasoline consumption—perhaps the only way—is to increase the price. This is not news to economists, of course. But a politician suggesting that gasoline prices should be higher in order to save the planet from global warming and petro-terrorists would be trounced at the polls.

Senator Christopher Dodd (D-CT), a dark-horse presidential candidate, had the temerity to propose a carbon tax this week, but he limited the scope to corporations and excluded voters' gasoline. Economists would agree with his statement that "You have to have a price-driven strategy if you are going to succeed in this thing." Political observers would agree with Senator Barbara Boxer (D-CA) that "There's no support for it," even though voters' sacred gasoline would be spared.

Let's face it—gasoline is cheap. Sadly, the cheaper it is, the more we burn. Apparently we humans are not smart enough to do otherwise.

— - *Dr. Rich Ferguson, Research Director, CEERT,* rich@ceert.org.