

# 2008–2009 Student Essay Contest

## Government's Role in Energy Markets

This past spring the Minneapolis Fed held its 21st Annual Student Essay Contest, which is open to high school students in the Ninth Federal Reserve District. The contest drew 240 essays from schools throughout the district. Submissions were divided into two categories: standard and advanced economics classes. The essay selected as the best over both categories is published here. Other top essays can be found at [minneapolisfed.org](http://minneapolisfed.org) under the Student Resources section of "Community & Education."

Fifteen finalists in each division received a \$100 U.S. savings bond. First- and second-place winners from both divisions received additional savings bonds. A paid summer internship at the Minneapolis Fed was awarded to the overall winner, Jacob Devine of Little Falls Community High School in Little Falls, Minn.

### Essay Question

#### What role, if any, should the government play in energy markets?

Energy markets affect everyone. The prices of oil and gasoline, as well as other types of energy, have risen dramatically in recent years. Politicians have responded to outrage over fuel prices with any number of plans to get costs under control. But energy policy has come into focus for other reasons, including concern about pollution, global warming and national security issues. In other words, this is a question rich in economics.

Students were asked, as always in the contest, to keep basic economic principles in mind. But they were instructed specifically this year to think creatively about government intervention into private markets—to assess the costs, outcomes and consequences of government's role in energy policy.



## Student Essay Contest Winner

## Vroom Vroom Vroom

**Jacob Devine**

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As Americans, we consider our cars almost members of the family. We spend hours of quality time with them while commuting, lovingly treat them to regular car washes and perhaps even shed a tear when their paint gets scratched. It's hard to measure emotional attachment economically, but clearly Americans need incentive to abandon their gas-sucking mechanical monsters.

Why should they be abandoned? Whether global climate change is a reality or not, pumping hundreds of millions of metric tons of carbon dioxide into the atmosphere each year certainly can't be benefiting the environment. Switching to hybrids or using other, more environmentally friendly modes of transportation would do much to ease the fears of climate-change adherents. The current cost of gasoline and car usage simply doesn't reflect the true cost to society, and the market has not been producing new, efficient energy sources and transportation on its own. Because of this, government should intervene by enacting Pigouvian taxes in order to decrease gasoline consumption.

Whether or not politicians want to believe it, gasoline in the United States is cheap, especially compared with gas prices in Europe. According to the Energy Information Administration, Italy, Germany and France all had prices between five and six U.S. dollars per gallon as of March 1, whereas prices in the United States barely broke two dollars. The United States did get a taste of higher prices last summer, when the record of \$4.11 per gallon was set on July 17, according to AAA. There was outrage from consumers who had grown accustomed to their cheap gas, and politicians joined in the outcry. Presidential candidate John McCain even supported a suspension of the federal

gas tax over the summer months to ease the pain at the pump. Amid the naysayers, however, there was a quiet buzz throughout the media, one that whispered: "Maybe this isn't so bad."

This isn't to say there weren't negative effects; the *New York Times* reported that high prices particularly hurt rural communities and the lower class. Some rural workers who relied on gasoline found staying home more cost effective than making the long, expensive trip to work. But despite these hardships, there was undoubtedly a silver lining. An estimate in *Time* calculated that over a year (from 2007 to 2008) of higher gas prices, lower air pollution saved 2,220 lives. *Time* also pointed out advantages such as decreased obesity (people walk more when not using their cars), less traffic (which leads to fewer accidents and lower insurance rates) and an adaptation of the housing market (suburban homes with no urban transport nearby suffer greatly). Unfortunately, one of the greatest results of high gas prices—the development of alternative energy sources—probably didn't occur. Gas prices weren't high enough for a long enough period of time for Americans to truly suffer consequences. Americans found short-term solutions, such as simply driving less, rather than permanent fixes.

Luckily, it's possible to artificially create an economy where consumers will be encouraged to look elsewhere for their energy sources. A sharp increase in gasoline price (a Pigouvian tax) with no expectation of relief would quickly force consumers to reevaluate any wasteful habits. Demand for gasoline would decrease, while demand for public transportation and more efficient cars would increase. Suppliers would have to comply with the new need, and Americans would be abandoning their precious cars in no time at all. The new tax would certainly hamper the lower class's ability to travel from place to place, but a gas tax would create enough revenue to allow an income tax decrease for the lower and

middle classes. The revenue could also be used to improve and expand current public transportation, a public good that the masses would surely be craving if gas prices were what some are suggesting. (Harvard's N. Gregory Mankiw suggests that the optimal Pigouvian tax on gasoline is \$2.10 per gallon.) In fact, there's no reason to stop at the gas tax when government could create more toll roads or even put a tax on cars themselves. Designating more toll roads would both raise revenue and encourage other forms of transportation. Taxes on the sale of cars could be based on a miles-per-gallon basis; that is, more efficient vehicles (with less social cost) would be mostly unaffected, while less efficient vehicles (which will have a negative social impact) would be more heavily taxed, further discouraging their use. Revenues from these taxes, as well, could be put toward softening their blow on the lower class.

The car is a unique American status symbol. To some, it is a waving red flag that signals, "I have money!" To others, the car is a tool, a stalwart companion whose technical aspects are most important. And to still others, the car is a reminder of poverty, perhaps even a temporary home. It will be tough to let go of the roles these vehicles play in our lives, but our culture may evolve with the changes. It is already somewhat fashionable to own a hybrid, but perhaps someday soon, riding the bus to school will be the cool thing to do. People may eventually realize, even though it is a tough sell, that leaving the car at home is well worth it. **R**

## Works Cited

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