Vouchers Can Free Us From Foreign Oil

BY MARTIN FELDSTEIN

The United States can and should reduce its dependence on imported oil with the goal of achieving complete oil independence by 2020. Otherwise, we will continue to be hostage to the policies of the current and future rulers of Saudi Arabia, Iraq, Iran and their neighbors.

The U.S. now imports more than half of the oil it consumes. Experts predict this will be more than two-thirds within 20 years if there is no change in policy. A reformed regulatory approach to drilling and refining and a tax code that reflects the national-security importance of increasing domestic oil would encourage exploration and expand our refining capacity. Both of those changes would help to slow our increasing reliance on oil imports. But the limited size of U.S. oil reserves means that moving toward oil independence requires a substantial reduction in the amount of oil that we consume.

One-third of our oil consumption is used to heat our homes. With the right incentives, home heating could be converted over time to domestically produced natural gas and to electricity produced by a combination of nuclear power, coal, natural gas and renewable sources. The national-security gain of reducing and eventually eliminating our oil dependence would outweigh the extra costs.

But the key to oil independence is to cut the amount of gasoline that we use on the road. Major reductions in gasoline consumption are clearly feasible. Over the past three decades, the quantity of gasoline per automobile miles fell 40%. Experts believe that existing technologies can be developed further in the next decade to cut that gasoline per mile to a half or even a third of today's level. If that is achieved, we will not need to import oil.

Such new technologies will not be free. Cars that economize on gasoline will have more expensive engines and be built of more expensive materials. In the decades that it will take to shift the stock of cars to new and much more fuel-efficient models, individuals can save gasoline by driving less, using public transportation more, buying tires that increase fuel efficiency, and so on. The key is to find market-based incentives that will induce individuals to make the right decisions.

Such market-based incentives are superior to the regulatory approach that the government has used since 1975, when the Corporate Average Fuel Economy (CAFE) standards began to force automakers to produce cars, but not trucks and other vehicles, that get more miles to the gallon. The effect was to cause households to shift from cars to SUVs and light trucks in a way that has caused the overall gas efficiency of new vehicles as a whole to be no better now than it was a decade ago. Moreover, the regulatory approach does nothing to encourage individuals to drive less, to use their cars more efficiently, or to shift sooner to new and more fuel efficient vehicles.

We need to reward those who economize on gasoline and to make others face the full cost of the gasoline they consume, including the implicit cost of reducing national security by increasing our dependence on oil imports. An obvious but unacceptable way to reduce gasoline demand would be a very big increase in the gasoline tax along European lines. Raising the gasoline tax by a dollar a gallon would probably push the price high enough to eventually eliminate the need for oil imports.

Some economists argue that an extra dollar a gallon would be justified even without considering national-security effects because it would make drivers face something closer to the true cost that their driving imposes on others by increasing congestion, road accidents, local environmental problems, and global warming. And the extra tax revenue of more than $100 billion a year could in principle be returned to the taxpayers by cutting income or payroll taxes in a way that strengthens work incentives enough to more than offset the adverse incentive effects of the gasoline tax itself.

But while all this might be true in principle, it falls short of the mark, indeed of this economist—would be skeptical that the extra gasoline taxes would actually be returned by cutting other taxes. In Europe, the revenue raised by heavy gasoline taxes is used to finance a bountiful welfare state. In the U.S., the current more limited gasoline tax finances government spending on roads and on urban transit systems. There is no hint of giving the money back to the taxpayers.

Fortunately, there is a better way to use market incentives to encourage gasoline conservation (and oil conservation more generally) without raising any tax revenue by using tradeable electronic Oil Conservation Vouchers. Here's how it might work for gasoline (with a similar system for home heating oil and other types of oil consumption).

If the government wants to reduce gasoline consumption in 2003 from a projected 130 billion gallons to say 140 billion gallons it would distribute to each Oil Conservation Voucher to individuals and businesses. Those who buy gasoline would pay the cash price at the pump plus one such “voucher” for each gallon of gasoline. The vouchers would not be pieces of paper but would be credits available in a debit account. The individual would spend these vouchers by using an Oil Conservation Voucher debit card in the gasoline pump just as a credit or bank debit card is currently used.

Because the vouchers are needed to buy gasoline, they would have a market value that is determined by the forces of supply and demand. If each voucher is worth, say, 75 cents, a driver would recognize that 10 gallons of gas means using up $7.50 worth of vouchers that could otherwise be sold for cash. The gas pumps could be programmed so that someone who lacks enough vouchers could buy them at the going price while anyone with excess vouchers could use them to offset some of the cash cost of the gasoline.

The political process would decide how many Oil Conservation Vouchers each household and firm would receive, taking into account geographic and demographic information. To the extent that this distribution of vouchers mirrors the income of payroll tax, the voucher system acts like a reduction in the individual's marginal income-tax rate just as it would if the government collected gasoline taxes and returned the revenue by cutting personal tax rates.

But there are three ways in which the tradeable voucher system is superior to a European-style gasoline tax. First, no revenue is collected and there is therefore no temptation to use the extra funds to increase government spending. Second, individuals enjoy a positive cash reward from selling excess vouchers if they economize on gasoline. And third the government can accurately control the amount of gasoline consumed by the number of vouchers it issues, in contrast to the uncertain response to a higher gasoline tax.

Although we can reduce our oil imports only gradually over a substantial number of years, complete oil independence can be a realistic goal. We cannot change the fact that the Saudis and other Persian Gulf states have most of the world's oil reserves. But with the right policies, we can make that fact irrelevant.

Mr. Feldstein, a member of the Journal's Board of Contributors, is a Harvard economics professor. He chaired President Reagan's Council of Economic Advisers.