

Should the United States Increase the Federal Gasoline Tax?

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ABSTRACT. Increasing the federal gasoline tax in the United States is highly debated. A higher tax would reduce the nation's dependence on foreign oil and have environmental benefits. Downfalls of a higher tax are the regressive nature of the tax and the unfair burden placed on drivers in rural areas. An increased gasoline tax is not popular with the public, so most politicians do not support a higher tax. An increased federal gasoline tax is a good idea if the increase is large and the additional revenue is used to reduce income taxes in a progressive manner.

I. Introduction

Imagine a proposal that promises to decrease carbon emissions, reduce dependency on foreign oil, help the environment, and decrease the government deficit. These benefits sound almost too good to be true. Some believe all those things can happen if the federal government increases the gasoline tax. As N. Gregory Mankiw said, "This may be the closest thing to a free lunch that economics has to offer." [Mankiw, 1999, 60]

But the proposal is not loved by everyone. At the mention of a tax increase, the general public revolts. Many people do not like to pay taxes, so any suggestions for a tax increase are strongly opposed. Gasoline prices reached record highs in the past couple of years. Why raise prices even further with an increased federal gasoline tax? Roy Cordato, the vice president for research at the John Locke Foundation, goes so far as to say that "pollution taxes advocated by many economists as a market based policy are actually a 'stealth' form of socialism." [Cordato, 2006, 7]

The federal gasoline tax topic is significant in the United States today. With the growing concern about global warming, an increased tax could help by reducing pollution. An increased tax could also make the United States more energy independent in the long run, but American drivers would be hurt by a higher gasoline tax in the short run.

Is increasing the federal gasoline tax the answer or is this another example of government trying to control society? Opinions on this topic range from completely abolishing the tax to increasing the current tax by

a large amount. The purpose of this paper is to analyze both sides of the argument and determine whether the federal gasoline tax should be raised. The conclusion reached is that an increased federal gasoline tax is a good idea if the increase is large and the additional revenue is used to reduce income taxes in a progressive manner. There are some negative consequences of a tax increase; it is not a “free lunch” as some believe.

II. Background

A. HISTORY

The first federal gasoline tax was adopted in 1932 at a level of one cent per gallon. The tax has increased in small amounts over the past 75 years. In 1951, government raised the tax to 2 cents per gallon to raise additional funds for the Korean War. The federal gasoline tax doubled in 1959 to 4 cents per gallon to assist in funding the construction of the new interstate highway system in the United States [Williams, 2005, para. 2]. The next increase was in 1981 to 9 cents per gallon. Subsequent increases in 1990 and 1993 resulted in an 18.4 cent per gallon federal gasoline tax, which is the current level of the tax [Buechner, 2007, table 1].

The revenues produced by the federal gasoline tax have been put to different uses in the past. From 1932 to 1956, all of the revenue went to the general account. In 1956, the Federal-Aid Highway Act created the Highway Trust Fund, where all the revenue from the gasoline tax would be placed. All of the revenue continued to be placed in the Highway Trust Fund until 1983, when some of the revenue was placed into the mass transit account and other trust funds. The majority of the revenue has been placed in the Highway Trust Fund to date. Currently, 15.44 cents out of the 18.4 cent per gallon federal gasoline tax are allotted to the fund [Buechner, 2007, table 1].

The federal gasoline tax is no stranger to opposition. Every proposed increase has been subject to opposition, and some proposed increases never passed. Controversy arose in 2000 about using the gasoline tax to generate revenue. Some policymakers considered suspending the most recent increase and others argued to suspend the entire tax. Political opposition is a significant factor in the federal gasoline tax debate, and will be discussed in more detail in a later section.

B. FEDERAL VERSUS STATE GASOLINE TAX

This paper will focus on an increase in the federal gasoline tax, not the state gasoline tax. According to Chouinard and Perloff, “federal and state gasoline specific taxes have different incidences on consumers.” [Chouinard, 2004, 55] The burden of the federal gasoline tax tends to fall evenly on consumers and wholesalers in the market. An econometric study conducted by Chouinard and Perloff concluded that every one cent increase in the federal gasoline tax resulted in a 0.47 cent increase in the retail price paid by consumers and a 0.56 cent decrease in the price received by wholesalers [Chouinard, 2004, 59].

State gasoline taxes, however, place the entire burden on the consumer. If one state’s tax is higher than surrounding states, wholesalers can choose to send more gasoline to the lower tax states. The ability of wholesalers to send more gasoline to lower tax states causes the elasticity of supply to a particular state to be greater than the elasticity of supply to the entire nation. Chouinard and Perloff’s study showed that a one cent increase in the state specific gasoline tax led to a 1.01 cent increase in the price paid by consumers and a 0.02 cent *increase* in the price received by wholesalers [Chouinard, 2004, 59]. Since the burden of the federal gasoline tax falls more evenly on the consumers and wholesalers in the U.S. gasoline market, an increase in the federal gasoline tax will be the focus of this analysis.

C. THE GASOLINE TAX AS A PIGOUVIAN TAX

Pigouvian taxes are a concept stemming from the work of early 20th century English economist, Arthur Pigou. A Pigouvian tax is designed to make marginal private costs equal marginal social costs and marginal private benefits equal marginal social benefits [Stiglitz, 2000, 224]. Most taxes distort economic incentives and create deadweight loss. Pigouvian taxes are designed to correct for external costs that would go unpaid otherwise. Some examples of Pigouvian taxes are a fast food tax, a green tax on exotic fruits shipped long distances, a congestion tax, and a gasoline tax [Corcoran, 2006b, 1].

Gasoline usage has many social costs. The most obvious is the air pollution caused from gasoline emissions. Proponents of a higher federal gasoline tax argue that the tax must be increased to “charge drivers for the damage they cause to the environment.” [Sipes, 2001, 300] Other indirect

social costs of gasoline usage associated with driving are road congestion, road decay, and car accidents [West, 2004a, 736n]. To account for these external social costs, a Pigouvian tax on gasoline would need to be set at a level equal to the additional social cost generated per unit of gasoline consumed.

There is much debate over the appropriate level of such a tax. In 2000, the U.S. Federal Highway Administration estimated that the cost of local vehicle pollution is about 2 cents per mile driven [West, 2004a, 751]. A study conducted by Parry and Small in 2002 confirms this estimate. If an average fuel efficiency of 20 miles per gallon is assumed, the appropriate tax level would be 40 cents per gallon to cover social costs from gasoline emissions [West, 2004a, 751]. Other studies estimate the costs of pollution to be from \$0.60 to \$1.60 per gallon, depending on population density [Sipes, 2001, 300]. The National Research Council concluded that the level of externality associated with a gallon of gasoline consumed amounts to 26 cents per gallon [Kleit, 2004, 281]. These varying estimates make it difficult to determine the proper level of a Pigouvian tax on gasoline. Determining an estimate for the indirect social costs of gasoline usage are particularly difficult, making the choice of a proper overall Pigouvian tax level on gasoline unclear.

The revenue from the federal gasoline tax is not currently used to pay for all of the externalities stemming from gasoline consumption. As mentioned earlier, most of the revenue from the federal gasoline tax is currently devoted to building and repairing the nation's highways, with the remainder going into a mass transit account. Building more roads encourages more driving and more gasoline consumption. In this sense, the federal gasoline tax operates more like a user fee than a Pigouvian tax [Williams, 2006, para. 5].

Increasing the federal gasoline tax is highly debated. There is disagreement on the appropriate level of a Pigouvian tax for gasoline. The tax has not been increased much in its history, partly because of political opposition. The next section examines both sides of the gasoline tax debate.

III. Gasoline Tax Debate

Proponents for an increased federal gasoline tax generally agree that a higher gasoline tax would induce people to drive fewer miles and buy more fuel efficient cars. This would lead to less air pollution, less

congestion, and safer roads. Opponents of an increased federal gasoline tax point out the regressive nature of a gasoline tax. This section presents arguments for and against a tax increase independent of the magnitude of the increase and independent of the intended use of the newly generated revenue. The magnitude of the increase and some possible uses of the revenue will be discussed in later sections.

A. REASONS FOR INCREASING THE FEDERAL GASOLINE TAX

1. Reduce U.S. Dependency on Foreign Oil

The United States' dependence on foreign oil is a pressing issue today. The dependence on foreign oil affects U. S. foreign policy and the stability of the entire American economy [Council on Foreign Relations, 2006, 3]. George W. Bush noted that "dependence on foreign oil jeopardizes our capacity to grow." [Riechmann, 2006, para. 2] Alan Greenspan would like to see higher gasoline taxes to increase national security [Mankiw, 2006c, para. 2].

The main source of the United States' dependency on foreign oil comes from oil demand for transportation [Rauch, 2002, para. 4]. An increased federal gasoline tax would discourage consumption, leading to less demand for foreign oil. The reduced demand in the U.S. would lead to lower oil prices if the world oil market were perfectly competitive. But the world oil market is not perfectly competitive. It is controlled by the world's largest cartel, OPEC, which restricts the quantity of oil produced [Friedman, 2006, para. 5]. Although the current market price for a barrel of oil is about \$54, one researcher asserts that the competitive market price for oil would be between \$4 and \$10 per barrel [Stern, 2006, 1650; Energy Information Administration, 2006, table 13].

Even though OPEC has price setting power, Mankiw believes the price of oil would fall in world markets and the burden of the tax would be shared by U. S. consumers and foreign suppliers [Mankiw, 2006b, A12]. One source warns that the OPEC countries could adjust their prices downward to maintain demand in the face of an increased U. S. gasoline tax [Corcoran, 2006a, 1]. If the price of oil falls, the price of gasoline also falls, which would return the quantity demanded of gasoline to near its original level. The objective of reducing U.S. dependency on foreign oil would not be accomplished. Mankiw's argument is still valid, though, since foreign suppliers will suffer from lower profits. This may

reduce the financing available for terrorist groups.

2. Reduced Congestion

In 2003, road congestion in large urban areas cost drivers nearly \$800 annually in wasted time and fuel [Texas A & M University, 2003, para. 3]. Mankiw argues that an increased gasoline tax would reduce congestion by encouraging people to live closer to where they work or to take public transportation [Mankiw, 2006b, A12]. Other economists believe that an increased tax would have a small effect on congestion, if any.

Most traffic congestion occurs during rush hour. As I.W.H. Parry explains, the demand for driving during these “peak” periods is inelastic [Parry, 2002b, 383]. A higher gasoline tax will cause people to cut down on the least important uses of their cars, not the most important [Cordato, 2006, 7]. Parry’s study showed that a gasoline tax provides 25 to 38 percent of the maximum efficiency gains in reducing congestion, compared to 90 percent for a uniform congestion tax [Parry, 2002a, 349]. A uniform congestion tax would require drivers to pay a fixed amount for driving during peak periods [Parry, 2002a, 341]. An increased gasoline tax will undoubtedly have some positive effect on congestion, however. Carpooling may become more popular, which would reduce the congestion during the peak rush hour period.

3. Increased Revenue

With the ever growing budget deficit, politicians are searching for ways to raise revenue for the government. Some have proposed to use revenue from an increased gasoline tax to cover government spending. Mankiw believes that if the gasoline tax is increased by one dollar, \$100 billion will be generated in one year in increased revenue [Mankiw, 2006b, A12]. This increased revenue can be used to start covering the deficit currently facing the U. S. government.

Those who oppose the increase in the gasoline tax believe it will only increase the government’s spending. They believe that if the government generates more revenue, the government will increase its spending. If this is the case, increasing the gasoline tax will not help decrease the deficit but may make it worse. Government spending is not as simple as opponents of the gasoline tax make it seem. The amount of government

expenditures is dependent on many factors including current economic conditions, which party is in office, the current military situation, and other factors. How the revenue of the gasoline tax is used actually determines the effectiveness of the increased gasoline tax, which will be discussed later in the paper.

4. Innovative Technology

If gasoline prices increase due to the increased federal gasoline tax, consumers will want cars that use the least amount of fuel but still meet their needs or wants. Consumers often desire a certain style of car, but with the increased gasoline costs they put more value on the mileage the car gets. The demand for cars that get high mileage rates would increase. Manufacturers would then compete to produce cars that get the best mileage but still have the other features that consumers desire. The increased gasoline tax would cause manufacturers to develop new technology to get the best mileage possible to attract the most consumers.

Those opposed to the increase believe that there are other ways to promote new technology besides increasing the gasoline tax. One option is to increase the minimum mileage requirement on new cars. Another option is to increase the fines manufacturers must pay if the cars they produce do not meet this standard. Studies have shown that increasing the gasoline tax is actually better than these options, and will be discussed next.

5. Environment

Government programs and taxes that aim to help the environment are not new. Examples that are specifically meant to combat the environmental problems associated with gasoline usage are the Corporate Average Fuel Economy (CAFE) program and the Gas Guzzler Tax. The CAFE program requires all automobile manufacturers selling at least 10,000 vehicles per year in the U.S. to meet or exceed an average level of fuel efficiency on the vehicles produced [Kleit, 2004, 280]. The Gas Guzzler Tax is collected from drivers whose cars get less than 22.5 miles per gallon [U.S. Department of Energy, 2007, table 1].

Many economists believe that an increased federal gasoline tax would be better than the current CAFE system. Andrew Samwick, professor of economics at Dartmouth, cites three problems with the CAFE program.

First, CAFE standards only address fuel economy and not miles driven. The standards increase the supply of high-fuel-economy vehicles but do not discourage driving. A higher gasoline tax would both increase demand for high-fuel-economy vehicles *and* reduce miles driven. Second, the standards are set at different levels for cars and trucks. Since the CAFE program is enforced on a manufacturer's entire fleet produced, a manufacturer who exceeds the mileage standard on cars can produce below-standard trucks without penalty. Finally, Samwick argues that the CAFE system is becoming too complex and manufacturers are finding loopholes [Samwick, 2005, para. 3-5].

The increased gasoline tax would be a simple and cost-effective policy that no driver or auto manufacturer could avoid. Andrew Kleit of Penn State studied the effect of a 3-miles-per-gallon increase in CAFE standards. His cost-benefit analysis showed that the increase in standards would cost about 12 times as much as the cost of a gasoline tax increase that would save an equivalent amount of gasoline [Kleit, 2004, 293]. According to Mankiw, the CAFE standards encourage people to drive more and are partly responsible for the recent growth in SUV production [Mankiw, 2006b, A12]. A study by Greene on the "rebound effect" confirms Mankiw's point. Greene's study found that a ten percent increase in fuel economy led to an increase in driving by two percent [Greene, 1999]. These arguments indicate that focusing on fuel economy alone is not sufficient to reduce gasoline consumption.

The purpose of the Gas Guzzler Tax is to discourage the production and use of low fuel economy vehicles [U.S. Department of Energy, 2007, para. 2]. In effect, the Gas Guzzler Tax places a tax on engine size [West, 2004a, 736]. The Gas Guzzler Tax does not apply to trucks, however. An increased federal gasoline tax would fall more heavily on drivers of fuel inefficient vehicles across the board, not only car drivers.

Not everyone agrees that an increased federal gasoline tax is the best method to help the environment. Jonathan Williams, staff economist at the Tax Foundation, believes taxing carbon emissions directly is superior in capturing the environmental costs from fossil fuels [Williams, 2006, para. 20]. William Baldwin of Forbes Magazine agrees, and goes further to say that a heavy carbon tax could replace the CAFE system, the Gas Guzzler Tax, and many of the tax credits currently given to households for certain measures of energy conservation [Baldwin, 2006, 20]. The problem with a carbon tax is that technology does not exist to accurately measure each vehicle's carbon emissions. Others question whether an

increased gasoline tax would have a significant impact on the environment at all. Cordato argues that “older, more polluting cars are being replaced by newer, cleaner cars” and that an increased gasoline tax will accomplish little in reducing smog pollution [Cordato, 2006, 6].

B. REASONS NOT TO INCREASE THE FEDERAL GASOLINE TAX

1. The Regressive Nature of a Gasoline Tax

The gasoline tax’s tendency to place a greater burden on low-income households is often stated as one of the strongest arguments against the tax [West, 2004a, 755]. Taxes on gasoline have been shown to be regressive in numerous economic studies. A 1989 study by Poterba concluded that gasoline taxes were about 15 percent of pre-tax income for the lowest income groups in the U.S., compared to 2.8 percent for the highest income groups [Poterba, 1989, 325]. A 2004 study by West confirms the overall regressive nature by calculating the Suit’s index for gasoline taxes. The Suit’s index is similar to the Gini coefficient in that it is bounded by -1 and 1, with a positive value indicating a progressive tax and a negative value indicating a regressive tax. West also finds that gasoline taxes tend to be regressive over the top half of the income distribution and progressive over the bottom half of the income distribution. This occurs because the poorest households do not own vehicles and the poor households that own vehicles are more price-responsive than upper-income households [West, 2004a, 755]. The working poor that do not have access to public transportation will be hurt more by an increased gasoline tax than the non-working poor who live off transfer programs [Kayser, 2000, 343]. The greatest burden of a gasoline tax falls on low- and middle-income households as a result.

Some believe that the regressive nature of the gasoline tax should not be considered a major flaw. William Gale, economist at the Brookings Institution, holds this viewpoint.

There could be compensating changes elsewhere. We should be thinking about progressivity and regressivity in the context of the overall tax system. Not every single feature of the tax system needs to be progressive to satisfy distributional needs. [Rauch, 2002, para. 13]

Many economists suggest possible uses of the gasoline tax revenues that could remedy the regressive nature of the tax. These possibilities will be discussed in a later section.

2. Inelastic Demand for Gasoline

The proponents of higher gasoline taxes claim that a healthier environment, less congested roads, and less dependence on foreign oil would be achieved by raising the federal gasoline tax. Demand for gasoline would need to fall significantly in order to realize these benefits, however. Research shows that demand for gasoline is very price inelastic. Past studies calculated estimates for price elasticity of vehicle miles traveled (VMT), which is a proxy for gasoline consumption. The estimates range from -0.12 to -0.94, with the mode in the -0.2 range [West, 2004a, 749n]. H. A. Kayser is suspicious of the methodology used by these studies. He points out that almost all studies use aggregate data instead of household data, which may not be appropriate for estimating household response to higher gasoline prices. His own study using household data from the Panel Study of Income Dynamics concludes that price elasticity of demand for gasoline is -0.23 in the short run [Kayser, 2000, 343]. Sipes and Mendelsohn sent out a survey to obtain information from households in California and Connecticut in their 2001 study. Sipes and Mendelsohn admitted the errors associated with survey research, but conclude that drivers are price inelastic in both the short run and long run [Sipes, 2001, 306].

If demand for gasoline is price inelastic as the research has shown, many of the benefits of the gasoline tax will be diminished. Price inelasticity of demand may not be a crippling factor in the gasoline tax debate, however. Many studies and economists believe that if the federal gasoline tax is increased by a significant amount, consumers will become much more responsive and will change their driving habits. These possibilities will be discussed in a later section.

3. Increased Prices of Other Goods

One fear expressed by those opposed to the increase in the gasoline tax is that consumers will see an increase in the prices they pay for other goods. Shipping companies will have to raise their prices to cover the increased cost of gasoline. Manufacturers and retailers in turn will have

to raise their prices to cover the increased cost of shipping. Consumers then pay a large share of the price increase resulting from the increased gasoline tax in the prices they pay when they buy other goods.

In response to this point, those who support the increased gasoline tax believe gasoline prices will not increase by as much as the increase in the tax. They believe that oil producers in the Middle East will pay for some of the tax [Mankiw, 2006b, A12]. The demand for oil will fall due to the increased gasoline tax, which will cause the price of oil in the world market to fall. Gasoline prices will not increase by the whole gasoline tax, but they will still increase to some degree. As mentioned earlier, one study concluded that a one cent tax increase led to a 0.47 cent increase in retail gasoline prices [Chouinard, 2004, 59].

4. Unfair Burden on Rural and Remote Areas

Some individuals and households will be more affected by an increased gasoline tax than others. Households in rural and remote areas with no access to public transportation will be affected much more strongly by an increased tax than urban households that have access to public transportation [Kayser, 2000, 343]. Jonathan Williams of the Tax Foundation believes that an increased gasoline tax would be inefficient in helping with congestion, since it would place the same tax on drivers in uncongested rural areas as drivers in urban areas [Williams, 2006, para. 21]. Strong proponents of the gasoline tax are not bothered by the unfair burden placed on drivers in rural and remote areas. As one writer put it, “So what? Very few taxes are perfect, and our electoral system already pampers the rural. I’d gladly exchange a gas-tax hike for abolition of agricultural subsidies. Any takers in Iowa?” [Sullivan, 2004, 104]

IV. Potential Size of the Tax Increase

Proponents of an increased federal gasoline tax offer varying suggestions on the appropriate size. Most agree that the increase needs to be significant because of the inelasticity of demand for gasoline. Mankiw would like to see a one dollar increase in the tax, phased in by 10 cents per year [Mankiw, 2006b, A12]. John Tierney suggests raising the gasoline tax every time the retail price falls [Tierney, 2005, A27]. Peter Van Doren of the Cato Institute claims that a 50-cent increase in the tax would reduce driving and still provide \$70 billion in extra revenue

annually [Tierney, 2005, A27]. Robert Frank, professor of economics at Cornell University, calls for a \$2-per-gallon increase [Frank, 2006, C3].

The question becomes whether the increased gasoline tax should be set as a Pigouvian tax or a tax aimed to solve additional problems. Either way, it is difficult to arrive at the appropriate tax level. As noted earlier, studies provide a wide range of estimates for the external costs of gasoline usage.

One thing that policymakers need to remember is the effect of increased federal taxes on state taxes. A study by Besley and Rosen finds that a 10-cent increase in the federal gasoline tax leads to a 3.2-cent increase in state gasoline tax [Besley, 1998, 383]. This means the effect of raising the federal gasoline tax will be amplified by the responding increase in state gasoline taxes. U. S. policymakers need to take the states' collective response into consideration if they decide to raise the federal gasoline tax.

V. Potential Uses of Additional Gasoline Tax Revenue

Most of the arguments for or against the increased gasoline tax hinge upon the crucial assumption of how the additional revenue will be used. The revenue from the federal gasoline tax is currently spent on road maintenance and construction. Additional revenue provided by a higher gasoline tax could fund research for alternative energy sources or tax breaks for converting vehicles to hybrids [Friedman, 2005, para. 4]. The increase would serve as a true Pigouvian tax if the additional funds were used for these purposes. Many economists suggest other uses, such as lowering income taxes, funding Social Security accounts, and reducing the budget deficit.

Funding for research would attack the United States' oil dependency problem. The tax increase would cause a decrease in quantity demanded for gasoline (if the increase were significant). The research for cost-efficient energy alternatives would lay the foundation for reducing overall demand for fossil fuels such as gasoline in the long run. Tax breaks for hybrids would not hurt, but would be a short term remedy.

The most popular suggested use of funds is to decrease income taxes. Income taxes reduce work effort and distort incentives. A study by Davis and Henrekson reports that an income tax increase of 12.8 percentage points reduces work by 122 hours per year per worker. It also lowers the employment-population ratio by 4.9 percentage points and increases

underground economic activity by 3.8 percent of GDP [Mankiw, 2006a, A12]. Supporters of using gasoline tax revenues to decrease income taxes suggest offering greater tax breaks for low income households. Tax breaks for low income households would remedy the regressive nature of the tax, and possibly make it progressive.

A study by West and Williams looked at a \$1.02 increase in the gasoline tax. Three scenarios for revenue use were considered. First, if the revenue were not returned through lower income taxes, the gasoline tax was regressive, as expected. Second, if the revenue were used to provide an equal percentage point income tax cut for all brackets, then the adjusted Suit's index value was -0.11, indicating that the tax was still regressive. Third, if the revenue were used to pay a lump sum to every adult, then the adjusted Suit's index value was 0.25, indicating a progressive tax. The lump-sum option was not an efficient wealth transfer, however. West and Williams estimated that the bottom 40 percent of households would be better off by \$146 per year while the upper 40 percent of households would be worse off by \$222 per year [West, 2004b, 552].

Another possible use of the additional revenue is to fund Social Security accounts. Similar to the reduction in income taxes, funding Social Security accounts would allow gasoline taxpayers to get some of their money back. John Tierney estimates that a 50-cent increase in the gasoline tax would provide enough revenue to put \$440 into a Social Security account for every worker each year [Tierney, 2005, A27]. Roy Cordato argues that the use of additional gasoline tax revenue to fund Social Security accounts would not make Americans better off because individuals could fund their own retirement accounts with the money saved by not paying a higher gasoline tax [Cordato, 2006, 7]. Assuming that a 50-cent increase results in a 25-cent per gallon increase in retail prices (it may be much larger), an individual would need to drive 1760 miles to accumulate \$440 in additional gasoline taxes. Since most drivers travel more than 1760 miles annually, it does not seem like funding Social Security accounts would be a good use of tax revenue.

VI. The Gasoline Tax in Europe

To help understand how an increased gasoline tax might affect American society, one can examine what is occurring in Europe. Many European countries tax gasoline heavily, up to 75 percent of the price of a gallon of

gasoline [Lehrer, 2000, para. 14]. This tax has been around for many years but has attracted more attention as gasoline prices rise. The high tax is not widely accepted as prices exceed seven dollars a gallon in some places in Europe [Ford, 2005, para. 2]. As the price of a barrel of oil continues to rise, gasoline prices also rise and more people are speaking out against the high gasoline tax in Europe.

Demonstrations are occurring in several European countries in protest of high gasoline taxes. They are using trucks and other vehicles to jam highways and slow down traffic [North, 2000, para. 2]. Truck drivers are refusing to move farm products to the markets [Lehrer, 2000, para. 10]. Taxes make up the bulk of what people pay at the pump and protestors feel this should be changed. In Britain, a gallon of gasoline cost \$6.06 in August of 2005. Without the tax, a gallon of gasoline would have cost \$1.97 [Ford, 2005, para. 16]. Protestors also feel that the government is not using the revenue strictly for road maintenance and to compensate costs to the environment but instead using the money to fund pet projects [North, 2000, para. 17].

The gasoline tax has had some positive effects in Europe that many people overlook. European car manufacturers are producing more fuel efficient cars because the public is demanding this type of car. According to a study by an International Energy Agency in Paris, the average light duty vehicle in the United States gets 21.6 miles per gallon while a similar car in Europe achieves 32.1 miles per gallon [Ford, 2005, para. 5]. President and CEO of DaimlerChrysler Corporation summarized it best when he testified before the House Energy and Commerce Subcommittee on Energy and Air Quality saying:

The difference is the European approach to energy and greenhouse gas policies. They've made some tough political choices. They've highly taxed gasoline, making the price three times higher than in the U.S., and they have incentives on diesel fuel. As a result of these policies, fuel economy is always high on a customer's list, and not just when there's a spike in fuel prices. [Capon, 2007, para. 3]

European drivers have learned to adjust to the high gasoline prices, not by choice but by necessity. They are more aware of conservation practices and pay attention to fuel economies of cars. This shows in the consumption of gasoline in Europe compared to the United States. In

2001, the European per capita consumption of gasoline and diesel was 286 liters a year while in the United states it was 1,624 [Ford, 2005, para. 11].

Why is this debate occurring now in Europe when this gasoline tax has been in place for years? Many blame OPEC. Vijay Vaitheeswaran, global energy correspondent for The Economist, states:

Europe had very high taxes two years ago too compared to America. The difference now is the world oil price. And for that, I think OPEC deserves the blame.They have tripled world oil prices largely through the actions of the oil cartel to scale back production. The reason why this has reached a flash point is because of things that are happening on the international oil market, not really about domestic taxation. [Lehrer, 2000, para 14]

Helping people understand what is occurring with OPEC and how it affects them is challenging. Most people believe it is easier to blame the high taxes and not look to the source of the high gasoline prices.

European governments are struggling, like the American government, to make citizens understand the purpose of the gasoline tax. The only difference in Europe is politicians put the tax in place without public support. In the United States, politicians are wary of the gasoline tax because of the public's opinion.

VII. Political Issues

Although an increased gasoline tax would solve problems, it is not likely to be passed by Congress. As mentioned before, every proposed increase in the tax has met political opposition in the past. It may not be worth pursuing a small increase in the tax because of the small benefits and the large political opposition that would exist. Sipes and Mendelsohn point out the significant opposition to a modest 5 cent increase proposed by the Clinton administration as an example [Sipes, 2001, 306].

Many Americans cringe at the thought of paying higher taxes. Recent misuse of gasoline tax revenues by the U.S. government makes motorists even more uneasy about a higher gasoline tax. Experts estimate that 40 percent of the Highway Trust Fund's annual budget is used to fund politically motivated projects [Williams, 2006, para. 9]. A Senate aide

summed up the overall impression of a gasoline tax increase by saying, "It's a political death sentence. This is an election year, and I don't think you're going to find anyone willing to stick their neck out that far." [Rauch, 2002, para. 9] Another writer said, "It would take strong presidential leadership to sell such a plan." [Klein, 2006, para. 5]

VIII. Conclusion

After analyzing the various arguments, an increased federal gasoline tax seems like a good idea if the increase is large and the additional revenue is used to reduce income taxes in a progressive manner. A higher gasoline tax has several benefits. The most significant of these benefits would be to make the U. S. less dependent on foreign oil and to tax users for the pollution they cause. The downfalls of a higher gasoline tax may be limited by careful choice of the level and use of the tax revenue. The gasoline tax will become less regressive if part of the revenue is returned in the form of lower income taxes. If the tax increase is sufficiently large, demand for gasoline will become more elastic over time. The other downfalls are more difficult to avoid. A higher gasoline tax will undoubtedly cause the price of consumer goods to rise and will fall more heavily on drivers in rural and remote areas.

More research needs to be done on the federal gasoline tax topic. Future research should focus on the impacts of a sizable gasoline tax on the elasticity of demand for gasoline. This will give a better estimate of the effects of a large increase in the federal gasoline tax. Research should also focus on ascertaining the appropriate amount of a Pigouvian tax on gasoline.

If the U.S. increases its federal gasoline tax, it could enjoy the benefits that European countries are experiencing such as higher fuel efficiency on new cars and less gasoline consumption. In order for an increased federal gasoline tax to become reality, political leaders will need to be persuasive in explaining the greater good that may be accomplished. Educating citizens on the purpose of the gasoline tax would help increase the acceptance of the tax. Increasing the federal gasoline tax is not a 'free lunch,' but the benefits outweigh the downfalls.

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