Transportation Fuels Policy Since the OPEC Embargo: Paved with Good Intentions

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By the end of 1972, things were great for oil. Prices were on a steady downward trend, falling on average by over 1 percent per year from 1861 to 1972. Real prices peaked in 1864 at $115.45 per barrel and trended downward reaching a low point of $10.42 per barrel in 1970. (All real prices are in 2011 dollars.) The drop in real oil prices coincides with increases in US oil consumption. Consumption increased dramatically from 0.011 quadrillion BTUs (quads) in 1875 to nearly 35 quads in 1973. Vehicle ownership was rapidly increasing and coal was giving way to oil as a fuel for electricity generation.

The picture was very different by the end of 1973. World oil prices rose sharply to an average of $52.85 (in 2011 dollars) during 1974 and the United States spent over $300 billion dollars on oil, nearly 7 percent of GDP. Expenditures on oil imports exceeded two percent of GDP. Prices stabilized at these higher levels until 1979 when a second oil shock occurred in the wake of the Iranian Revolution. Protests in Iran hampered oil production and led to the suspension of Iranian oil exports. This was followed by the Iran-Iraq War which lowered production in both countries. Oil prices peaked at over $100 per barrel in real terms (2011 dollars) in 1980; US oil outlays exceeded 10 percent of GDP in both 1979 and 1980. Perhaps more importantly, spending on oil imports exceeded 4.5 percent of US GDP in 1980.

The first response from these events was to strengthen price controls on oil, prompting the need for rationing rules, but long gasoline lines and shortages still occurred. The speed limit on highways was reduced to 55 miles per hour. Corporate Average Fuel Economy (CAFE) Standards and Gas Guzzler taxes were subsequently adopted. To the chagrin of economists, absent from these policies was a gasoline tax. Indeed, price controls on both oil and gasoline pushed prices below equilibrium levels. The reliance on alternatives to Pigouvian taxes led to a long literature in economics estimating the inefficiencies of these alternative policies. (See, for example, Fischer, Harrington, and Parry 2007; Jacobsen forthcoming; Holland, Hughes, and Knittel 2009; and Holland et al. 2010.)

I review the policy discussion related to the transportation sector that occurred during the time through the lens of the printed press and polling. I pay particular attention to whether gasoline taxes were “on the table,” as well as how consumers reacted to the inefficient set of policies ultimately adopted. A more complete discussion of the political discussion and polling evidence is available in Knittel (2013).

I. Were Gas Taxes on the Table?

President Nixon was not against gas taxes. In fact, Nixon pushed for gasoline taxes even before the oil embargo. Just prior to the embargo, the Nixon administration considered a gasoline tax as a way to reduce the shortages generated by the price controls. It was reported that in June of 1973 many of Nixon’s advisors supported a tax as high as 10 cents per gallon (40 cents in 2011 dollars). The regressivity of such a tax

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†To view additional materials, and author disclosure statement(s), visit the article page at http://dx.doi.org/10.1257/aer.103.3.344.
was frequently noted in newspaper articles and op-eds of the time.

The embargo led to more discussions about the merits of a gas tax. A November 10 New York Times article reports that the administration was considering a 40-cent gasoline tax ($1.61 in 2011 dollars), with the revenues refunded back to consumers. Nixon’s economic advisors supported such a plan, but the Treasury Department opposed it because a refunded tax would be difficult to administer. Such a large tax appears to have been abandoned by the administration and reports from December of 1973, state that the plan was widely believed that the public support for a gas tax led to the firing of both Morton and Sawhill.

Ford suggested that his major concerns were the regressivity of such a tax and its large incidence on rural communities. But, the President also seems to have viewed the idea of taxing a product, but then refunding the revenues from that tax back to consumers, as a logical inconsistency.

Besides Ford’s advisors, other policy makers of the time favored gas taxes. The bipartisan Joint Economic Committee recommended a 30-cent gasoline tax with the estimated $25 billion refunded to consumers. To put this in perspective the federal gasoline tax at the time was a mere 4 cents. Newspaper articles at the time appeared to actively debate the merits.

By the end of 1974, President Ford may have left the door slightly open for increases in gasoline taxes. The New York Times reported that President Ford had his main advisors meet him in Colorado on December 26 to discuss energy policy. The article reports that the President would entertain proposals for a higher gasoline tax. Why the shift? The need for revenue. Congress called for a reduction in income tax rates to ease the recession and Ford viewed a

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2 Eileen Shanahan, “Huge Tax on ‘Gas’ Under Discussion,” New York Times, November 10, 1973. The article discusses the political difficulties of such a tax. In particular, earmarking the revenues would cause problems and that the tax would be regressive. One noted advantage of the tax is that it would cool the economy during a time of economic boon.


gasoline tax as a way to offset these revenue reductions.\(^\text{10}\) This shift is consistent with Ford not understanding the merits of taxing a product to change marginal incentives while returning the revenues from the tax to consumers. The next day, however, Ford slammed the door, saying: “That’s about as dead as any option I know…I think there are many better choices.”\(^\text{11}\)

Congressional support for, and opposition against, cut across political party; although Democrats, on average, appear to have been more favorable. The Senate Democratic Leader, Mike Mansfield, stated he was open to higher gasoline taxes. A number of other key Democratic senators supported gasoline taxes. For example, Lloyd Bentsen, D-Texas, proposed a gasoline tax, to be rebated back to consumers, that would begin at 5 cents in 1976 and increase to 30 cents per gallon in four years.\(^\text{12}\) The House Democrat’s Energy Plan for 1975 included an increase in the gas tax of 23 cents per gallon.\(^\text{13}\)

Other Democrats opposed gasoline taxes. One of the biggest opponents was the Democratic Chairman of the Ways and Means Committee, Wilbur D. Mills from Arkansas. In an August 1974 speech to the Southern Farmers Association, Mills stated that if the Ford Administration put forth a 10-cent gas tax, “he (Ford) would know that as long as I am chairman of the Ways and Means Committee it would not be enacted.”\(^\text{14}\) Senators Water Mondale, D-Minnesota, and Edmund Muskie, D-Maine, were also publicly opposed. Opposition to tax increases appeared to have been based, at least publicly, on the regressive nature of the tax. For example Representative Peter Peyser, R-New York, and John Brademas, D-Indiana, circulated a letter asking their colleagues to oppose a tax on the grounds that it would “push the already strained working man and working woman past the financial breaking point.”\(^\text{15}\)

President Carter pushed for gasoline taxes and oil tariffs throughout his presidency. In his 1977 Energy Plan, Carter called for an increase in the federal gasoline tax and the decontrol of oil and gasoline prices. Oil prices were still hovering around $50 in real terms; they had been roughly constant from 1974 to 1977. But, price controls on oil and concerns about the level of imports continued efforts to incentivize conservation.

Carter’s gasoline tax plan was based on whether the nation’s oil consumption exceeded some baseline. Under the plan, if gasoline consumption exceeded the target in 1978, a 5-cent tax would be imposed. For every percentage point future consumption exceeded the target, an additional 5 cents would be added to the tax. The entire tax was capped at 50 cents.\(^\text{16}\) The revenues from the tax would be given back to consumers in the way of tax credits on a per capita basis.\(^\text{17}\)

Despite being Democratic-controlled, Congress blocked his attempts.\(^\text{18}\) The main opposition came from rural states and from labor groups. Shortly after his proposal the president of the Building and Construction Trades Department of the American Federation of Labor and Congress of Industrial Organization (AFL-CIO) said: “We must not hit hardest those with the lowest incomes. High gasoline taxes would be a regressive tax on the poor, and there’s little evidence that high gasoline prices would promote conservation.”\(^\text{19}\) The president of the International Brotherhood of Teamsters, Frank E. Fitzsimmons, said that it would be “awfully hard on the people who must commute some 20 and 30 miles to work.”\(^\text{20}\)

There was some initial optimism in Congress that such a tax could be passed. Representative

\(^{18}\) From 1977 to 1979 the make up of the Senate was 61 Democrats, 38 Republicans, and one independent. The House had 292 Democrats and 143 Republicans. During the second half of his presidency, there were 58 Democrats in the Senate (41 Republicans and one independent) and 277 Democrats in the House with 158 Republicans.
Al Ullman, D-Oregon, chairman of the Ways and Means Committee said that: “There’s always been strong opposition and always will be. That’s just automatic.” But, he went on to say, “A gas tax, put together a certain way, with adequate rebates, would be passable.” Others were more skeptical. Senator William D. Hathaway, D-Maine, said, “The rural states would have a particular problem adjusting to a gas tax increase…Past history would indicate it would not have much of a chance of passage in Congress.” By now, many were convinced that the US car culture rendered higher gas taxes a non-starter. Senator Henry M. Jackson, D-Washington, and chairman of the Energy and Natural Resources Committee, called Carter’s gas tax, “just not do-able” going on to say: “Right or wrong, we have an automobile culture. The truth is, people are going to continue to buy gasoline because they have to get to work.” In 1977 there were 0.67 vehicles per capita compared to over 0.80 today.

On June 9, 1977, the Ways and Means Committee voted 27 to 10 against Carter’s “stand-by” tax. It also voted 25 to 11 against a 3-cent tax with the revenues financing public transportation. There seemed to have been some optimism for the passage of the 3-cent tax, but members noted that the plan also called for oil taxes that would increase gasoline prices (these were ultimately not adopted, however). There were a few attempts to revive the gasoline tax over the next few months, but nothing came of them. Ultimately, there was a tax placed on industrial oil use in cases where coal was an option, but no taxes that would affect gasoline prices.

The oil and gasoline price landscape changed again in 1979 with the Iranian Revolution. By the end of the year, prices were roughly $93 a barrel. By February of 1980, the price was about $100 a barrel. Calls for higher gas taxes began to show up in op-eds. A New York Times op-ed called for a revenue-neutral $1 per-gallon tax, but admitted that “The American people, most politicians reckon, are less willing to accept a tax on auto power than a tax on mother’s milk.” A month later Robert Stobaugh and Daniel Yergin called for a tax of between 25 and 50 cents. In December, another op-ed in the New York Times called for a 50-cent tax saying, “America can deploy an oil weapon of its own—a stiff tax that would hold down the demand for gasoline, and whose revenues would be rebated to the public.”

The fate of a significant gasoline tax appeared to be sealed by 1980, however. Carter officials commented in January of 1980 that Carter had rejected proposals within the White House to increase the gasoline tax by 50 cents.

II. Consumer Response to Gas Taxes

Consumers seemed to have been the biggest opponents of gasoline taxes. Polling at the time suggested that the public supported gas taxes only under certain, and unrealistic, circumstances.

A Harris Survey asked 1,525 households a series of questions varying the size of the tax, its impact on oil imports and the use of the revenue. The poll asked consumers if they would support a 10- or 20-cent tax increase without any other conditions. Consumers overwhelmingly opposed such a tax (80 percent and 74 percent against a 20- and 10-cent tax, respectively). Support increased if either consumers received an income tax credit for the gasoline taxes or the 10-cent tax meant the United States would no longer import oil from the Middle East. Only if consumers were able to write-off tax payments and a 10-cent tax would lead the United States to be independent of Middle East oil did a slight majority of those polled support a tax (51 percent).

Consumers appeared to have preferred other, less efficient, ways to reduce consumption. When asked whether they would prefer a tax on gasoline or a tax on large inefficient cars in order to limit gasoline consumption, 70 percent of

those surveyed by ORC Public Opinion Index in December of 1974 preferred a tax on large cars; only 13 percent favored a tax on gasoline.\(^{28}\)

Consumers also preferred rationing over increases in fuel prices. When asked whether they would prefer the country to conserve oil through mandatory gasoline rationing on an odd-even basis or an 11-cent increase in gasoline prices as a result of an import tariff on oil, 60 percent of consumers preferred rationing, 25 percent preferred the tariff, and 15 percent were undecided. This is a common theme. A similar survey in January of 1975 asked consumers if they preferred Ford’s oil tariff (projected to increase gasoline prices by 11 cents) to a nationwide rationing program with the understanding that consumers would not get all of the gasoline they needed. 61 percent of those surveyed preferred rationing.\(^{29}\) A January 1974 New York Times article said the Federal Energy Office was receiving over 2,000 letters and telegrams a day on how to solve the energy crisis. About 90 percent of the letters preferred rationing.\(^{30}\)

Polling evidence during the Carter administration suggests that Congress was voting with the will of the people. Senator Jackson’s views seemed to represent those of consumers. A CBS/New York Times survey, taken days after Carter’s Energy Plan was proposed, found that consumers opposed higher gasoline prices by a 62 to 32 margin and higher oil prices by a 53 to 37 margin. The survey also found that blue-collar families were less likely to favor gas taxes than white-collar families. Similar to the current debate about climate change, one source of the lack of support for taxes was that not everyone was convinced that an energy crisis existed. Small-car-driving respondents agreed with Carter on the severity of the energy crisis by a 56 to 38 margin, but only 38 percent of large-car-driving respondents agreed.\(^{31}\)

Consumers continued to favor rationing over both gasoline taxes or allowing prices to clear the market. A 1977 Cambridge Reports/Research International survey of 1,500 people found that 65 percent of people preferred rationing over allowing prices to adjust to $2 (in nominal terms, where then-current prices were roughly 60 cents) as a way of reducing a 25 percent shortage in gasoline; only 15 percent preferred the market outcome.\(^{32}\) This was a steep increase from current prices of roughly 60 cents; but, the $2 focal point does not appear to have driven these results. In April of 1978, the Gallup Organization conducted a poll asking: “If the consumption of oil and gas is reduced in the United States, which of these two ways would you prefer as a way to achieve this: start a rationing program that would require drivers to reduce the miles they drive by about one-fourth, or raise the tax on gasoline so that a gallon will cost 25 cents more than it currently does?” 55 percent of those polled favored rationing, while only 25 percent favored allowing prices to increase by 25 cents.\(^{33}\)

Just prior to the long gasoline lines that occurred in the summer of 1979, the LA Times conducted a survey asking whether higher prices or rationing are the answer to oil and gasoline shortages.\(^{34}\) Forty-two percent of those polled preferred rationing, with 18 percent preferring “some other solution.” Only 28 percent preferred higher prices. Soon after the long lines, consumers did not appear to have changed their opinion. An ABC News-Harris Poll of 1,192 people taken in January of 1980 found that 80 percent of consumers were against a 50-cent gasoline tax. In contrast, 70 percent of respondents favored odd-even gas rationing and 65 percent felt Congress should pass tougher gasoline rationing legislation. A New York Times poll taken around the same time suggests that there may not have been a strong urban-rural split on this issue. Of the 502 New York City residents polled during December of 1979, 90 percent opposed raising gasoline taxes as a way of reducing gasoline demand. Rationing was favored by over 60 percent.\(^{35}\)

\(^{28}\) ORC Public Opinion Index, December, 1974.

\(^{29}\) Conducted by Yankelovich, Skelly, and White during January, 1975, and based on 1,046 telephone interviews.


\(^{33}\) Gallup Poll (AIPO), March, 1978.

\(^{34}\) Los Angeles Times Poll, May, 1979.

III. Conclusions

A frequent argument for why CAFE standards and alternative fuel mandates exist is that these policies hide their true cost. This argument is difficult to reconcile with the public’s support for similarly inefficient policies such as price-controls-plus-rationing and gas guzzler taxes. The costs associated with price-controls-plus-rationing and gas guzzler taxes are certainly salient. Consumers at the time had experienced rationing and long gasoline lines so would have understood the costs of these policies. Consumers also understood that prices for fuel inefficient vehicles would increase under gas guzzler taxes. What can explain the support? I don’t purport to answer this question. Perhaps, economists have overstated the value of people’s time, or understate the psychic costs associated with the regressivity of high energy prices. Admittedly, this runs counter to the results in Deacon and Sonstelie (1985) that find when faced with a choice of a zero queue bundled with a high price for gasoline and waiting for a low price, consumers seem to reveal a value of time that is in-line with their wage rates.

REFERENCES


