

Running on Fumes

Can an increase in the gasoline tax save tax reform?

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A central and worthy theme of the Trump Administration is to overhaul the U.S. tax system to permit U.S. businesses to compete on a level playing field with their international competitors. Any tax reform proposal faces substantial political obstacles, but there is broad consensus that corporate tax rates should be reduced. President Trump is proposing dropping the federal rate from 35% to 15%, moving U.S. companies to a territorial tax system, and bringing down personal rates.

Reforming the U.S. tax system represents the most promising policy initiative for encouraging greater direct investment and lifting economic growth. But even with a generous estimate of dynamic economic expansion from lower taxes, incentives to repatriate U.S. corporate profits held abroad, and broadening the tax base to eliminate corporate and personal tax deductions, some additional revenue will be needed to build a political consensus to get the tax reform effort implemented as a long-term policy. Several proposals have been made to gain additional revenues, including a border adjustment tax, carbon tax, and even a European style value-added tax. Political opposition to each of these initiatives makes them highly unlikely as a potential source of new income.

An additional revenue proposal under consideration, (and one that also comes with widespread political opposition) is an increase in the federal excise tax on transportation fuels (gasoline and possibly diesel fuel). As the accompanying chart (Fig. 1) shows, the U.S. federal excise tax on gasoline has not been raised since 1993, although average state gasoline taxes are up about 5 cents per gallon between 2000 and 2015, with some notable increases in 2016.¹

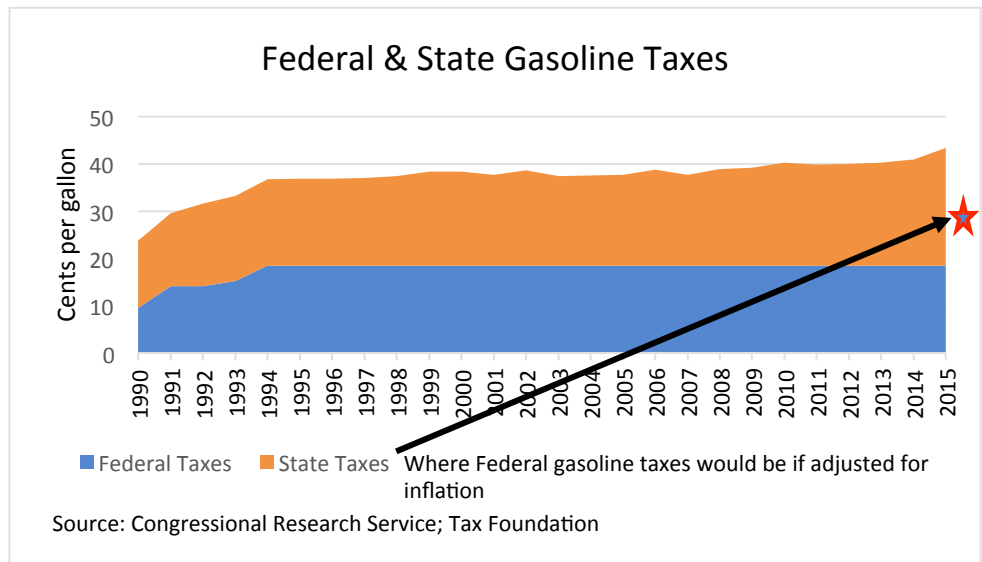


Fig. 1

If the federal tax were adjusted for inflation it would stand at approximately 31 cents per gallon instead of the current rate of 18.4 cents. For 2016, a gasoline tax of 31 cents per gallon would have lifted federal revenues to \$44 billion instead of \$26 billion, an \$18 billion difference. Of course, over time some reduction in gasoline use is likely from the higher costs associated with a tax increase. Such an

increase in the gasoline tax, however, represents no more than a 5-7% increase in the price of gasoline and is not likely to lower longer-term demand more than 2-3%.² In addition to the likely consumption reductions in response to the higher gasoline price, revenue losses are already built into most projections from expected longer-term reductions in gasoline demand. Even with these adjustments, the Federal government could raise an additional \$150 billion over ten years through a one-time adjustment in the excise tax accounting only for inflation since 1993.

Fuel Taxes and Regulatory Reform

Could regulatory reform reduce the effective cost of the tax to American drivers? Regulatory reform in the transportation fuels sector has considerable merit whether or not new taxes are imposed. Existing federal and state subsidies and mandates for alternative fuels and automobile technologies have raised the price of gasoline and the cost of new automobiles. Removing mandates on biofuel use for gasoline and diesel fuel, combined with reform of state programs could reduce gasoline prices anywhere from 5 to 10 cents per gallon.³ A bit more reliance on gasoline taxes could also provide a strong rationale for preserving a single national CAFE standard and cost savings to consumers by stretching out the compliance schedule for higher fuel efficiency requirements for new cars. CAFE standards already are moving along a higher cost function and are accompanied by some important and counterproductive second order effects. As new cars become more expensive due to the requirements to meet higher CAFE standards, the existing fleet turns over at a slower rate undermining the near-term objectives of the regulation. This is especially true for older and larger cars (so-called gas guzzlers), which continue to retain considerable value in the used car market. If you make new cars more expensive the fleet of older cars will turn over at a slower pace.

Gasoline taxes are regressive and can have a disproportionate effect on low-income households. Transportation fuel costs can represent a relatively high proportion of the earnings of low-income workers who often commute long distances and drive older and less fuel-efficient vehicles. Any gasoline tax could be formulated with a rebate provisions for lower income households, and still raise substantial new revenues. Tax reform is a promising strategy to raise the rate of economic growth. But the reform will require new revenues. As discussed above merely adjusting the gasoline tax to account for inflation will raise substantial new revenues and provide a genuine opportunity to pull back on some of the more costly regulatory programs in the transportation fuels sector and automobile industry.

End Notes

¹ Although federal gasoline taxes have remained at 18.4 cents per gallon since 1993, states have raised excise taxes in recent years. In April 2017, the California legislature voted to approve Senate Bill 1, which among other changes raises gasoline taxes to around 50 cents per gallon. Figure (1A) below shows the 2017 gasoline taxes by state:

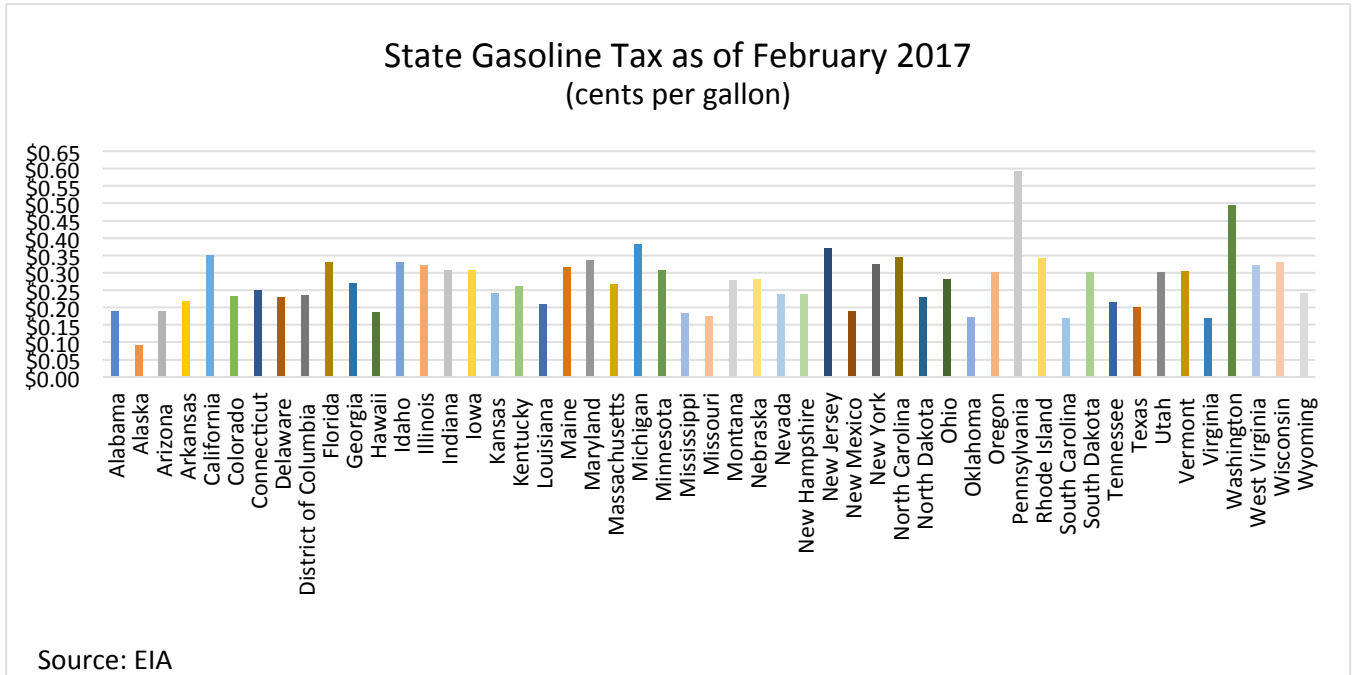


Fig. 1A

² Gasoline prices are largely driven by two factors, the price of the feedstock to produce gasoline (crude oil) and state and federal taxes. Over the last twelve months average prices for regular gasoline have risen from \$2.20/gal to \$2.38/gal (Figure 2A). A 12-14 cents per gallon tax increase would raise prices by approximately 6 percent if prices remained in this general range over the next 5-10 years and the likely demand response to this price increase (price elasticity of demand) would result in a reduction in gasoline consumption of approximately 3 percent. For a discussion on price elasticity of demand for gasoline see Espey, Molly. "Gasoline Demand Revisited: An International Meta-analysis of Elasticities." *Energy Economics* 20.3 (1998): 273-95. Web. Goodwin, Phil, Joyce Dargay, and Mark Hanly. "Elasticities of Road Traffic and Fuel Consumption with Respect to Price and Income: A Review." *Transport Reviews* 24.3 (2004): 275-92. Web. In addition, a host of factors (demographics, technology, fuel efficiency improvements) are all pointing to a decline in gasoline consumption over the next ten years. Nevertheless, merely adjusting federal gasoline taxes for inflation would likely raise an additional \$150 billion over the next ten years.

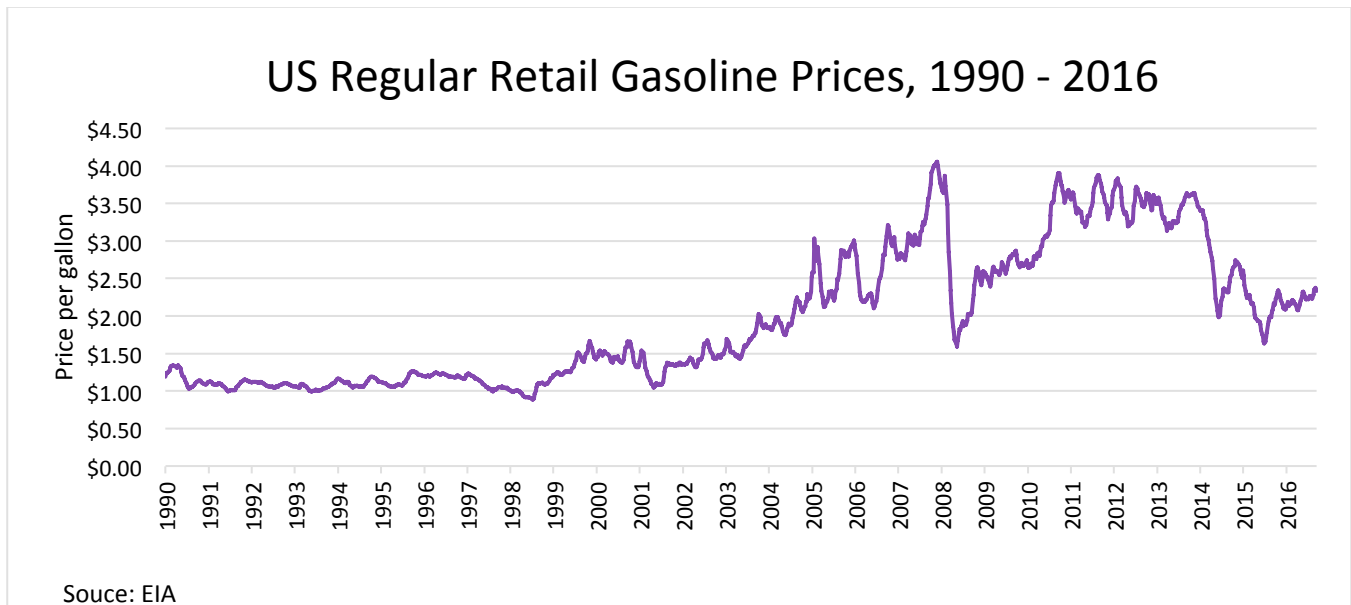


Fig. 2A

³ Considerable analysis has been undertaken on the costs of blending mandated volumes for biofuels into gasoline and diesel fuel as well as rising costs of the Corporate Average Fuel Economy (CAFE) program. For an assessment of the costs of the Federal mandates for renewable fuels for gasoline and diesel fuel see the following EPRINC testimony and reports:

Oversight of the Renewable Fuel Standard, Testimony by Lucian Pugliaresi before U.S. Senate Committee on Environment and Public Works. February 24, 2016.

<http://eprinc.org/wp-content/uploads/2016/03/Testimony-before-EPW-on-RFS-Feb-24-2016.pdf>

Questions for the Record from Senator Deb Fischer, EPW Hearing, February 24, 2016.

(Answers by Lucian Pugliaresi and Max Pyziur)

<http://eprinc.org/wp-content/uploads/2016/04/ResponseToQuestionsFromSenatorDebFischerApril2-2016.pdf>

The Biofuel Mandate: Technical Constraints And Cost Risks, November 2015.

(Max Pyziur and Lucian Pugliaresi)

<https://www.dropbox.com/s/j9lw1i7urw2fwc6/Biofuel%20Mandate%20Nov%202015.pdf?dl=0>

For an assessment of the rising costs of transportation fuel in California see,

Understanding the High Cost of California's Transportation Fuels, November 2016.

(Max Pyziur)

<http://eprinc.org/wp-content/uploads/2016/11/Californias-High-Trans-Fuel-Prices-Nov-2016-v2FINAL-emailb.pdf>

For a discussion on the rising costs of meeting CAFE standards see,
*CAFE, Gasoline Prices and the Law of Diminishing Returns: A New Agenda
for the Midterm Evaluation*, March 2016.

(Lucian Pugliaresi and Max Pyziur)

<http://eprinc.org/2016/03/cape-gasoline-prices-and-the-law-of-diminishing-returns-a-new-agenda-for-the-midterm-evaluation/>

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