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THE PRICE EFFECT OF GEORGIA'S TEMPORARY SUSPENSION OF STATE FUEL TAXES

Introduction

When Hurricane Katrina hit the Gulf Coast in August 2005, it had in its immediate aftermath a significant and positive effect on the retail price of gasoline. In the wake of Katrina and the resulting increase in the gasoline price, Governor Perdue issued an Executive Order suspending the collection of all state fuel taxes in Georgia beginning on September 2, 2005, with the expressed intention of giving some price relief to Georgia consumers. The suspension was temporary, and lasted only until the end of September. While the possibility of taking such action was discussed by some of the other immediately surrounding states (e.g., Tennessee, Alabama, Florida, South Carolina, North Carolina), Georgia was the only state to act (Setze 2005).

In this report we explore the following question: Did the temporary suspension of the Georgia gasoline tax have the intended effect of lowering the gasoline price for Georgia consumers? The answer to this question is clearly of some interest, especially since suggestions have sometimes been made for Congress to temporarily suspend federal fuel taxes. We find that the suspension was almost immediately followed by a drop in the consumer price of gasoline, by roughly two-thirds of the

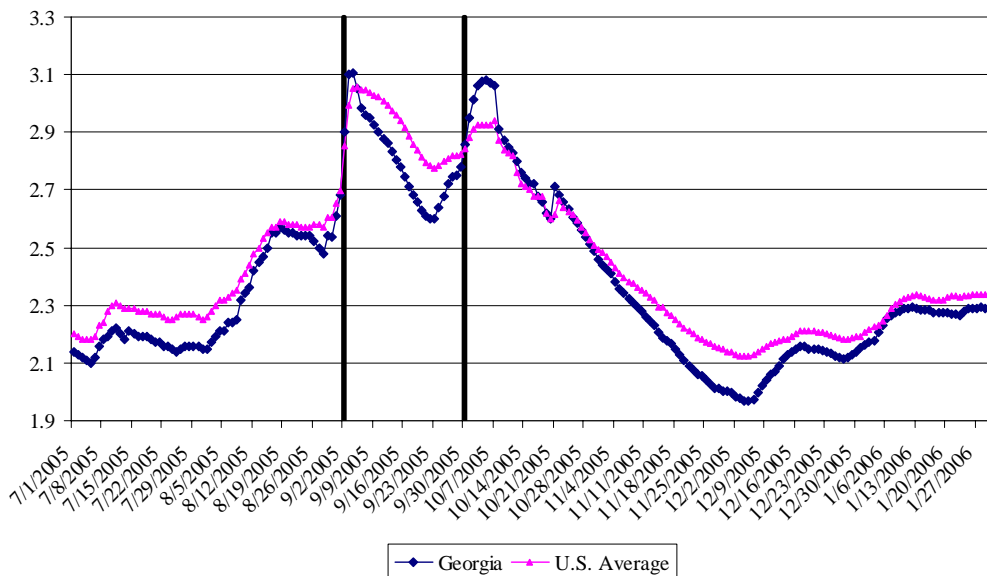
amount of the tax suspension. When the temporary suspension was removed at the end of September, the price of gasoline increased.

Some Background on Georgia's Practice of Taxing Gasoline

Georgia's state taxes on gasoline are collected from wholesale distributors. For September 2005, the total effective fuel tax on gasoline was 15 cents per gallon, and it was this 15 cents tax that the Governor suspended. Since the tax is collected from the wholesale distributor, the wholesale price includes the fuel tax. Thus, the cost on September 2, 2005 of the gasoline in the retailers' tanks included the fuel tax. It would have taken a few days for retailers to obtain gasoline on which the distributor did not pay fuel taxes.

It is typically assumed that excise taxes (and other consumption taxes) are fully shifted to consumers in the form of higher retail prices. However, it is well-known that the effect of an excise tax on the price of the product depends upon the relative price elasticities of demand and supply. However, we suspect that it was expected that the per gallon retail price of gasoline would fall by the amount of the tax (i.e., by 15 cents), so that the consumer would reap

FIGURE A. GAS PRICES IN GEORGIA AND U.S. AVERAGE



the entire benefit from the tax cut. Whether this happened with the Georgia fuel tax suspension depends upon supply and demand.

Data and Empirical Strategy

Because other factors were changing at the time of the gasoline tax suspension, we cannot simply compare the price in Georgia before, during, and after the suspension in order to determine the effect of the fuel tax suspension on gasoline prices in Georgia. To control for the changes in other factors that might have affected the price of gasoline, we compare daily gasoline prices in Georgia to the U.S. daily average price and to daily gasoline prices in states that border Georgia. By comparing the price of gasoline in Georgia to the price in other states, we can determine whether the suspension resulted in a reduction in the price of gasoline in Georgia.

Figure A presents daily gasoline prices in Georgia and the U. S. daily average price for the seven months, July 1, 2005 through January 31, 2006. The vertical lines indicate the 2nd and 30th of September, i.e., the tax suspension period. The figure indicates clearly the negative impact of the Georgia suspension of gasoline taxes on gasoline prices in Georgia and the positive price impact of the reimposition of the Georgia tax.

As can be seen in the figure, the gas price increased for both the U.S. and Georgia in the first few days of September, but then gas prices fell and fell more in Georgia. The difference in prices reached 18 cents on September 18th and stayed there

until September 23rd. At that point, prices began to increase, with the gas price in Georgia increasing faster. At the end of September, the gas price in Georgia was 1 cent higher than the U.S. average. In order to account for the possible time lag in the wholesale delivery of gasoline that did include the fuel excise tax, we consider price differences over the period September 5th to September 30th. The average difference in daily price for this period was 12.0 cents, or 80 percent of the 15 cent Georgia fuel tax.

This would be the effect of the fuel suspension if the prices in Georgia and the U.S. were the same before and after the suspension. However, as can be seen, that is not the case. For the period October 1, 2005 to January 31, 2006, gas prices in Georgia averaged 2.8 cents less than the national average. Excluding the first week in October increases the difference to 4.7 cents. This suggests that the effect of the suspension was to reduce the retail price of gasoline in Georgia by 7.3 to 9.2 cents per gallon.

We also compared the price of gasoline in Georgia to the prices in neighboring states. Outside of September, gas prices in South Carolina and Tennessee were very similar to prices in Georgia. So it appears that a comparison of the September price differential with these two states would be a good measure of the effect of the fuel tax suspension. Again, ignoring the first four days of September, gas prices in Georgia averaged 11.9 cents less than in South Carolina. During the period October 1 through November 31, gas prices in Georgia

average 0.6 cents higher than in Georgia, suggesting that the effect of the suspension was 12.5 cents.

Gas prices in Georgia averaged 8.0 cents less than in Tennessee during the suspension. During the period October 1 through November 31, gas prices in Georgia averaged 1.7 cents higher than in Georgia, suggesting that the effect of the suspension was 9.7 cents.

A more precise measure of the effect of the suspension on gasoline prices in Georgia can be obtained through regression analysis. Our empirical strategy is to measure how the difference in daily prices between Georgia and, say, the United States, changed as a result of the gas suspension. For the most basic estimation of differences between the price in Georgia and the U.S. price, we find that the fuel tax suspension is associated with a 9.7 cent decrease in the retail price of gasoline in Georgia.

Overall, these estimation results indicate that the effect of the Georgia gasoline tax suspension was roughly two-thirds shifted to consumers in the form of lower gasoline prices.

Reference

Setze, Karen (2005). "States' Post-Hurricane Katrina Gas Tax Suspension Fever Subsidies." *State Tax Notes* September 26: 901-2.

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