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ESTIMATED DISTRIBUTIONAL IMPACT OF T-SPLOST IN THE ATLANTA METROPOLITAN AREA

Overview

This brief examines the incidence of the proposed 1 percent Transportation Special Purpose Local Option Sales Tax (T-SPLOST) on different income and age groups in the Atlanta Regional Commission (ARC) region. The T-SPLOST is to be voted on by Georgians on July 31, 2012. Of particular interest is the effect the 1 percent sales tax would have on low-income families and senior citizens. We find that the T-SPLOST might cost low-income families as much as 1.7 percent of pretax income. However, this additional burden could be mitigated by purchasing qualifying food products through various supplemental food programs such as the federal food stamps program, which would be exempt from the T-SPLOST. Senior citizens generally would face a smaller additional burden due to the T-SPLOST, representing 0.6 percent of their average pretax income.

Methodology

The tax would apply to the same base of goods as other local option sales taxes, which include food and over-the-counter medications. The statute excludes automobiles and gasoline.[1] The ARC and the state fiscal economist have estimated that the average cost per person of the T-SPLOST in the ARC region will be $112 annually. To estimate the additional cost of the T-SPLOST to various income groups and age groups, this analysis uses the ARC estimate and the 2010 Bureau of Labor Statistics Consumer Expenditure Survey (CEX).

The CEX lists consumer unit expenditures in broad categories of goods and services by age and income.[2] Generally, only goods are subject to sales tax in Georgia. This analysis uses broad categories of expenditures from the CEX that would be subject to the T-SPLOST, with some adjustments to certain categories of CEX expenditures, if goods and services are listed together. For instance, in the category vehicle repair and maintenance, the amount spent on parts is subject to sales tax in Georgia, while the amount spent on labor is not. In keeping with other studies, the analysis assumes 50 percent of vehicle repair and maintenance expenses are for parts and thus subject to the T-SPLOST. The same assumption is used in the personal services category, with 50 percent of the spending in this category subject to T-SPLOST. Finally, under the category of drugs, the analysis assumes the full amount are over-the-counter drugs and subject to sales tax. This assumption likely overestimates the taxes incurred, particularly for the elderly, as the CEX category includes both over-the-counter and prescription drugs. Prescription drugs are exempt from all state and local sales taxes in Georgia. However, this assumption is made to facilitate comparison across age and income groups and thus represents the maximum impact T-SPLOST would have on consumers for over-the-counter medications. All of these expenses are then summed to yield the estimated taxable expenditures for each income group, by consumer unit. We convert these to per capita amounts, based on the number of people in the average consumer unit for the various income groups.

The CEX data are from a national sample. To convert to the demographics of the ARC region, we utilize the per capita expected cost of $112 estimated by the ARC and the state fiscal economist. We apportion this estimate to the various income groups based on the ratio of each group's per capita sales tax burden at the national level to that of the national average sales tax burden. For instance, it is estimated that consumers with incomes from $5,000-$9,999 would owe an additional $54 per capita due to an additional 1 percent sales tax, while the national sample average per capita amount is $79. Thus, we allocate the $112 average ARC per person estimate to the $5,000-$9,999 income group using the ratio of $54/$79, yielding an estimated additional sales tax of $76 per person. The additional cost incurred for all the income groups due to the T-SPLOST is listed in Table 1.

Impact of T-SPLOST by Income

Included in Table 1 are the incomes of the average reference person in the income group adjusted for the southern region. The average southern consumer in the CEX has a lower average annual pretax income of $58,824 than the national average of $62,481. As the average pretax incomes for the various income groups (and age groups) are not available for the southern consumer, we adjust the national sample by the ratio of the southern consumer's pretax income divided by the national average consumer. The average number of persons in the consumer unit is from the CEX and the amount of sales tax incurred per consumer unit is calculated by multiplying the per capita tax incurred by the number of persons in the consumer unit. The table also includes the percent of the additional sales tax incurred as a percent of pretax average income. Thus, the average consumer unit of 2.5 people in the ARC region would incur an additional $280 annually in sales tax, which represents 0.5 percent of annual pretax income. Not surprisingly, given the generally regressive nature of sales taxes, the lowest income group, those making $5,000-$9,999, would pay the highest percent of pretax income in additional sales tax, 1.7 percent for the average consumer unit.[3] The highest income group, those making $70,000 and above, would pay the most per-person and as a consumer unit, $142 and $439 respectively. However, for the wealthiest group of consumers, the additional sales tax incurred represents only 0.4 percent of their average annual pretax income. Note for low-income families that take advantage of the Federal Supplemental Nutritional Assistance Program, formally known as food stamps, and Women Infants and Children program, food purchased at grocery stores would be exempt from the T-SPLOST under current Georgia law. We are unable to control for these purchases using CEX data, thus our estimates for these low-income groups are likely towards the maximum additional cost incurred.

Impact of T-SPLOST by Age Group

The additional cost of the T-SPLOST for various age groups is examined next. The CEX data and the same estimation methods used in the income range section above, are used for the age group analysis. The pretax income is adjusted to represent the southern consumer. For those ARC residents 65 and over (seniors), it is estimated that the additional cost per person of the T-SPLOST would be $136 (see Table 2). This represents 0.6 percent of the average senior's consumer unit pretax income. The under 25 years age group has the highest percent of income per consumer unit going to the T-SPLOST with 0.7 percent. Those in the age groups 35-44 and 45-54 experience the greatest total increase in sales tax due to the T-SPLOST of $324 per consumer unit. Note for the age group 35-44, this is due to this age groups higher consumer unit size.

As was noted earlier, prescription drugs would be exempt from the T-SPLOST. However, over-the-counter medications would be subject to the tax. Seniors do consume more drugs and medical supplies than the average consumer. The CEX category of drugs includes over-the-counter medications as well as prescription drugs. Only the over-the-counter medications would be subject to the T-SPLOST. To estimate the additional cost to seniors it is assumed all drugs in the CEX are subject to the tax. The average consumer unit in 2010 spent $604 annually on drugs and medical supplies, while consumer units with seniors spent $963 annually. Thus, the additional cost to seniors relative to the average consumer for over-the-counter drugs and medical supplies would be $4 annually per consumer unit due to the T-SPLOST. Again this is likely to be the maximum amount as part of the drug spending measured in the CEX is for prescription drugs, which are exempt from the T-SPLOST.

Conclusion

In summary, it is estimated that the average consumer unit in the ARC region would incur an additional $280 annually in sales tax due to the T-SPLOST, which represents 0.5 percent of annual pretax income. The analysis finds that the T-SPLOST might cost low-income families as much as an additional 1.7

TABLE 1. ARC REGION T-SPLOST COSTS FOR VARIOUS INCOME GROUPS

	All Consumer Units	$5,000 to $9,999	$10,000 to $14,999	$15,000 to 19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $69,999	$70,000 and More
Per Capita Cost	$112	$76	$86	$84	$85	$92	$95	$102	$142
Income Before Taxes	$58,824	$7,609	$11,868	$16,460	$23,538	$32,727	$42,116	$55,785	$121,592
Persons in Consumer Unit	2.5	1.7	1.6	2.0	2.2	2.4	2.6	2.8	3.1
Consumer Unit Total Cost	$280	$129	$138	$168	$186	$220	$247	$286	$439
Tax as % of Income	0.5%	1.7%	1.2%	1.0%	0.8%	0.7%	0.6%	0.5%	0.4%

Sources: Author's calculations based on data from 2010 Bureau of Labor Statistics Consumer Expenditure Survey and the Atlanta Regional Commission.

TABLE 2. ARC REGION T-SPLOST COSTS FOR VARIOUS AGE GROUPS

	All Consumer Units	Under 25 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65 Years and Older
Per Capita Cost	$112	$82	$91	$98	$116	$137	$136
Income Before Taxes	$58,824	$25,308	$56,124	$71,672	$74,931	$64,873	$38,870
Persons in Consumer Unit	2.5	2.0	2.9	3.3	2.8	2.2	1.7
Consumer Unit Total Cost	$280	$165	$262	$324	$324	$301	$231
Tax as % of Income	0.5%	0.7%	0.5%	0.5%	0.4%	0.5%	0.6%

Sources: Author's calculations based on data from 2010 Bureau of Labor Statistics Consumer Expenditure Survey and the Atlanta Regional Commission.

percent of pretax income. However, this additional burden for low-income families could be mitigated by purchasing qualifying food products through the Federal Supplemental Nutritional Assistance Program, and the Women Infants and Children program which would be exempt from the T-SPLOST. Senior citizens generally would face a smaller additional burden due to the T-SPLOST, representing 0.6 percent of their average pretax income.

NOTES:

1. The first $5,000 of an automobile purchased would be taxed in counties without a public transit sales tax. Currently in the ARC region only Fulton County and DeKalb County would qualify for this exemption.

2. The consumer unit can generally be thought of as a family, but can include individuals in other living arrangements, such as roommates or non-traditional couples.

3. Note we do not include the CEX income group that makes less than $5,000 in our analysis, as this group appears to consist primarily of the self-employed. This group has a negative pretax income due to business losses. The CEX survey has self-employment income for this group of -$5,001 on average. This is considerably more than the next low-income group with -$96. Thus those in the less than $5,000 group do not seem like typical low income families, but rather individuals with small businesses, that may have wide variation in business incomes and expenses.

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