FISCAL RESEARCH CENTER

policybrief

August 2009, Number 198

HOUSEHOLD TAX BURDEN EFFECTS FROM REPLACING AD VALOREM TAXES WITH ADDITIONAL SALES TAX LEVIES

Among other provisions, the GREAT plan for Georgia that was introduced in the General Assembly in 2008 called for the elimination of school property taxes on homesteaded property, with local government property tax revenue being replaced by state grants. The proposal also called for the elimination of the exemption of food for home consumption (in essence, re-taxing food) and the addition of numerous consumer services to the sales tax base. In this Policy Brief, I provide analysis of the distributional effects on households from reducing local ad valorem taxes on homesteaded property and increasing sales tax levies by expanding the sales tax base to include food for home consumption and selective personal services. The tax policy I consider is not meant to reflect any particular version of the GREAT Plan. I consider the full elimination of local property taxes on homesteaded property and the addition of a limited set of services to the sales tax base. The net effect of the policy is a net tax reduction, but I do not consider the distributional consequences of the budget cut that would be required under such a policy.

For this analysis, I only examine explicit direct effects on households from the additional sales tax levies and homestead property tax reductions, that is, I ignore indirect effects that might result from behavioral adjustments and from the impact on federal income tax levies due to changes in the amount of deductions. Matthews and Sjoquist (2007) and Matthews, Sjoquist and Winters (2007) provide estimates of the potential revenue effects of preliminary versions of the GREAT Plan; for a more complete understanding of the GREAT Plan readers should probably start with these studies. Although the proposal to increase sales tax levies as a full or partial replacement of property taxes is not currently under formal consideration in Georgia, having an understanding of the distributional effects of that proposal can inform future policymakers. Note that the details of the calculations are contained in the Appendix. The calculations are made for what is considered a typical Georgia household in each income class and do not precisely reflect the aggregate of individual households within each income class.

Findings for Georgia Households

The total revenue effects from imposing the state sales tax on most currently exempt services, revoking the state exemption on food for home consumption, and removing *all* local property taxes on homesteaded property appear in Table 1. The estimates indicate that completely eliminating local property taxes on homesteaded properties would have reduced 2004 revenue by about $4.3 billion. The new sales tax

Georgia State University | ANDREW YOUNG SCHOOL OF POLICY STUDIES

revenue would total approximately $766 million, meaning the original GREAT proposal was not revenue neutral for households. Readers should recognize, however, the latter total does not include all currently-exempt services as many are economically or politically difficult to tax – these are referred to as "untouchable" in Table 1; further discussion of this issue can be found in the Appendix. It is also important to note that that the services total ($286 million) is smaller than the totals in Matthews and Sjoquist (2007) and Matthews, Sjoquist and Winters (2007). The smaller total is due to the subjective nature of deciding on which services will end up taxed – I chose fewer services, as described in the Appendix.

Given the $3.5 billion imbalance between the property tax cut and the new sales tax revenue, I also consider a revenue neutral reduction in property taxes on homesteaded property In this second scenario, the $766 million in additional sales tax revenue allows an 18 percent reduction in property taxes on homesteaded properties when I impose an equal percentage decrease in both urban and rural millage rates.

Table 2 presents the distribution by income group of the net effect of the two scenarios. The effects from the total reduction in homesteaded property taxes (scenario 1) appear on the left side of Table 2 and the partial, 18 percent reduction in homesteaded property taxes appears on the right side. Clearly, moving to the partial reduction option makes a big difference for the lowest and highest income households. For example, the poorest Georgia households benefit strongly (as a share of income) from eliminating the property tax on homesteaded property, but do poorly under scenario 2, under which they experience a net tax increase of just over one percent of income. In essence, the home-owning poor gain enough from property tax elimination to offset the additional taxation on purchases, but the gain is considerably smaller with the partial property tax reduction. On the other end, the highest income households go from a near average benefit to a slight tax reduction in the partial property tax removal.

In Table 3, I present a breakdown by urban status for scenario 2. Since I applied the same 18 percent change to the higher urban millage and the lower rural millage, one finds the largest nominal gain for the urban, high-income households and the largest nominal loss for the two urban lowest income classes. However, urban-rural status does not produce a significant difference in the distribution of the tax change (compare the left side to the right side of Table 3). For example, the poorest urban households see an overall tax increase of 1.1 percent while the rural households face a 1.0 percent increase.

Perhaps more striking is the pattern in Table 4, which shows the percentage of households within an income class that experience a tax increase. This illustrates the issue that tax relief was not granted to renters or to homeowners with insufficient house value as to owe significant local property taxes. Under my first scenario (complete elimination of local property taxes on homesteads), gains to a fraction of poor households were strong enough to offset the tax increase on a majority of poor households (as much as 72.9 percent). Tables 3 and 4 reveal how the poor would be treated if the property tax relief is not so strong. Clearly, the additional tax burden on the poor is not large, but relief is generally non-existent for the groups. I note, however, that the poorest households in the Consumer Expenditure Survey (CES) generally spend a good deal more than their income, causing researchers to question whether an in-sample household reporting low income is truly poor or is simply experiencing a low-income year.[1]

Conclusion and Future Research

In this Policy Brief, the household tax burden effects have been estimated for two scenarios under which property taxes are reduced and the sales tax is extended to selective services and home food. Eliminating the property tax represents a significant overall net tax reduction for Georgia households, but raises the important question of how policymakers will make up what would be an almost $3.5 billion shortfall.

Under either the full or partial property-tax-reduction scenario, all Georgians do not benefit equally. Since renters (and some low-value homeowners) do not benefit from the tax change, more than half of the lowest income Georgia households may face a slight tax increase. By the common measure of effective tax relief – relief as a share of income – the two proposals affect the urban poor very differently. If policymakers can somehow fund the complete elimination of property taxes, some urban poor would do fairly well. Conversely, the combination of new sales taxes and an 18 percent reduction of property taxes on homesteaded property means a small tax increase for the urban poor and a small overall tax cut for the highest income urban households.

As mentioned above, incomplete information limits this analysis. Subsequent research should address the static nature of these estimates. There are reasons to believe that under the change, the new Georgia sales tax base will be subject to some behavior-based effects, which are not considered here. For example, the new services tax base should erode from its current level since providers will have an incentive to move activity out of Georgia or replace formal service provision (e.g., landscaping) with casual activity. In turn, however, home-owning households will

TABLE 1. 2004 HOUSEHOLD TAX REVENUE EFFECTS OF ELIMINATING PROPERTY TAXES AND ADDING NEW SALES TAX LEVIES

Item	2004 Revenue Amount (Millions)
1. Current State Sales Tax on Georgia Household Purchases	$1,824.6
2. New State Sales Tax on Select (Currently) Exempt Services	285.6
3. State Sales Tax on Currently Exempt Food	479.7
4. Local Property Tax on Georgia Homesteads	4,251.9
Net Effect from Adding #2 and #3 and Removing #4	-3,486.6
Exhibit: Potential state sales tax on "Untouchable" Household Services	2,095.8

Note: In these calculations, select exempt services include household maintenance, repairs and insurance, automobile repair labor (estimated as half of total automobile repairs), domestic services excluding childcare and water and sanitation charges.
SOURCE: author's calculations on 2004 Consumer Expenditure Survey data.

TABLE 2. TAX BURDEN CHANGES FOR TWO GEORGIA TAX SWAPS, BY INCOME CLASS

	Scenario One: Total Removal of -----Homestead Property Tax----		Scenario Two: Partial Removal of ------Homestead Property Tax-------	
Income Class (1000s)	2004 Change (in Millions)	% of Income	2004 Change (in Millions)	% of Income
<$10	-72.9	-3.2	25.2	1.1
10 to 20	-189.8	-2.5	32.2	0.4
20 to 30	-192.4	-2.2	22.9	0.3
30 to 40	-176.6	-1.7	22.3	0.2
40 to 50	-342.2	-2.4	1.9	0.0
50 to 80	-580.4	-2.0	2.6	0.0
>70	-1,932.4	-2.0	-107.0	-0.1
All	-3,486.7	-2.1	0	0.0

SOURCE: author's calculations on 2004 Consumer Expenditure Survey data.

TABLE 3. TAX BURDEN CHANGES FOR THE PARTIAL PROPERTY TAX REMOVAL TAX SWAP BY INCOME CLASS AND URBAN STATUS

Income Class (1000s)	----------Urban Households---------- 2004 Change (in Millions)	% of Income	----------Rural Households---------- 2004 Change (in Millions)	% of Income
<$10	20.4	1.1	4.7	1.0
10 to 20	27.3	0.5	4.9	0.3
20 to 30	17.8	0.3	5.1	0.2
30 to 40	17.8	0.2	4.6	0.2
40 to 50	-1.9	0.0	3.7	0.1
50 to 80	-2.8	0.0	5.3	0.1
>70	-105.9	-0.1	-1.1	0.0

Note: The new sales tax applies to select services and food with an estimated revenue-neutral partial removal of the property tax on homesteads.
SOURCE: author's calculations on 2004 Consumer Expenditure Survey data.

TABLE 4. HOUSEHOLDS AND SHARE OF HOUSEHOLDS WITH A TAX INCREASE UNDER THE PARTIAL PROPERTY TAX REMOVAL TAX SWAP, BY INCOME CLASS AND URBAN STATUS

Income Class (1000s)	-------Urban Households------ Number of Households	Share of Households with a Tax Increase	--------Rural Households------- Number of Households	Share of Households with a Tax Increase
<$10	302,660	75.5	82,799	57.9
10 to 20	398,140	61.7	109,151	32.9
20 to 30	271,797	52.9	84,106	38.8
30 to 40	231,049	46.4	67,580	37.4
40 to 50	244,894	28.8	78,203	32.1
50 to 80	379,511	28.2	121,056	37.1
>70	656,208	15.3	142,498	19.4

SOURCE: author's calculations on 2004 Consumer Expenditure Survey data.

experience lower escrow payments and they should respond by increasing taxable spending.

Finally, the analysis here misses two additional indirect household effects. The first is the impact on federal income tax payments if Georgia eliminates the property tax. The second follows from the important tax reductions for home ownership – which could increase land values and reduce rents as more Georgia households try to take advantage of the homestead tax cut and become homeowners. Subsequent research should attempt to model related effects.

Appendix: *Calculation Steps*

Step 1: Create a simulated Georgia with the Consumer Expenditure Survey

The first step is to create a usable model of Georgia households. The Consumer Expenditure Survey (hereafter, CES) was developed by the Bureau of Labor Statistics and it includes the relevant spending, income and property ownership categories, but it is designed to capture national or regional household-level spending patterns (i.e., it is not designed for use at the state level due to the low number of observations per state). For this analysis, I go beyond the reported 2004 Georgia households and use all southern urban households and all U.S. rural households in the 2004 data. Each observation is then weighted such that the aggregate model resembles Georgia in income, household size, race and urban status.

Step 2: Create three sales tax bases

The spending categories for each household are separated into spending subject to the current state sales tax, spending on currently-exempt home food and spending on currently-exempt services.[2] This allows for the application of new state levies on the latter two items in order to fund property tax relief. I do not add local levies.

One of the largest currently-exempt consumer services is "shelter." This includes principle and interest payments by homeowners and rent for other Georgia households. Given the spirit of a property tax reduction, I have chosen to not include this spending in the new sales tax on services that is simulated here. In addition, I believe that extending the Georgia sales tax to public transportation, healthcare, education, vehicle finance and insurance, babysitting and child daycare, cash contributions and life insurance spending will create significant economic and/or political hurdles and thus leave them exempt in my "untouchables" category. Thus, the sales tax on services here only extends to home maintenance and repairs, home insurance, my estimate of labor on automobile repairs (half of the overall maintenance and repair category), miscellaneous spending, domestic services and water services.

A key tax burden assumption exists in the calculations below where the burden of the Georgia sales tax is assumed to fall on consumers. In other words, before-tax prices do not change when the sales tax is newly applied to previously exempt commodities. An example of the assumption is the shelf price of a grocery item remains the same if the state sales tax is (re)imposed.

Step 3: Create current property tax levies

The CES includes limited information on real property ownership for each participating household. For example, participants report an estimate of what they think each property would sell for. With this information and some assumptions, I can calculate representative local property tax levies on each parcel.

Unfortunately, local homestead exemptions and property tax rates vary across the state. The estimates here are based on representative local structures across Georgia. These local structures feature:

1) A rural homestead exemption of $3,000;
2) An urban exemption of $6,000;
3) A rural property tax levy of 25 mills; and
4) An urban levy of 35 mills.

The property tax rates are total millage rates, not just for schools. The values are consistent with local property tax structures in Georgia, but our property tax relief estimates here are approximate and cannot be interpreted as precise.

Additional Calculation Details

The estimates are calculated on five quarters of CES data for interviews from January, 2004 to March, 2005. Each observation is converted to annual amounts (where quarterly values are reported) and the southern urban household and all rural household populations are used for constructing this model of Georgia households. The observations are then assigned weights such that the weighted sample resembles Georgia in income, household size, race and urban or rural status.

The current CES program was initiated in 1980. The principal objective is to collect buying-habit information for American consumers, but the participants also report characteristics for owned property. The consumer expenditure data are used for research endeavors and for regular revision of the CPI.

The survey is conducted by the U.S. Census Bureau for the Bureau of Labor Statistics and it consists of two components: a diary survey and an interview survey. For this report, we use the FMLY files that include summary expenditure variables from the interviews are used for spending profiles. These files contain information on household characteristics, income, and summary level expenditures. The information is not detailed enough to analyze highly specific goods and services (e.g., spending on personal computers is lumped together with spending on similar items), but the FMLY files allow examination of some broad changes to the structure of the Georgia sales tax.

It is important to note that reported expenditure amounts include all sales and excise taxes for all items purchased by the consumer unit for own use or for others. For items such as home food spending, which are taxable in a handful of states, tax inclusion in the CES could slightly overstate the additional sales tax collection estimates here.

References

Bahl, Roy and Richard Hawkins (1997). The Sales Tax in Georgia: Issues and Options. Georgia State University Fiscal Research Center, FRC Report 1.

Matthews, John and David Sjoquist (2007). Replacing All Property Taxes: An Analysis of Revenue Issues. Georgia State University Fiscal Research Center, FRC Brief 171.

Matthews, John, David Sjoquist, and John Winters (2007). Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base. Georgia State University Fiscal Research Center, FRC Report 170.

Notes

[1]See Bahl and Hawkins (1997) for a more thorough discussion.

[2]The separation into three potential sales tax bases is imperfect as a couple of the CES spending categories do not fall completely into taxable or currently exempt. For example, I classify entertainment spending as taxable even though the category includes membership fees that can be exempt in Georgia. The currently taxable base includes the following spending categories: food away from home, alcoholic beverages, utilities, household equipment, apparel, new and used car, other vehicle, gasoline, half of vehicle maintenance and repair, vehicle rentals and leases, entertainment, personal care, reading and tobacco.

ABOUT THE AUTHOR

Richard Hawkins is Principal Associate with the Fiscal Research Center and an Associate Professor of Economics at the University of West Florida. He did his undergraduate work at Emory University and received his Ph.D. in economics from Georgia State University. While at GSU he was a Research Associate in the Fiscal Research Center. His research interests include public finance, particularly the sales tax.

ABOUT FRC

The Fiscal Research Center provides nonpartisan research, technical assistance, and education in the evaluation and design the state and local fiscal and economic policy, including both tax and expenditure issues. The Center's mission is to promote development of sound public policy and public understanding of issues of concern to state and local governments.

The Fiscal Research Center (FRC) was established in 1995 in order to provide a stronger research foundation for setting fiscal policy for state and local governments and for better-informed decision making. The FRC, one of several prominent policy research centers and academic departments housed in the School of Policy Studies, has a full-time staff and affiliated faculty from throughout Georgia State University and elsewhere who lead the research efforts in many organized projects.

The FRC maintains a position of neutrality on public policy issues in order to safeguard the academic freedom of authors. Thus, interpretations or conclusions in FRC publications should be understood to be solely those of the author. For more information on the Fiscal Research Center, call 404-413-0249.

RECENT PUBLICATIONS

Household Tax Burden Effects from Replacing Ad Valorem Taxes with Additional Sales Tax Levies. This brief estimates net tax effects across income classes from a sales tax for property tax swap; where Georgia property taxes are reduced and state sales taxes increased. (August 2009)

An Examination of the Financial Health of Georgia's Start-Up Charter Schools. This brief examines the financial health of start-up charter schools in Georgia during the 2006-07 school year. (July 2009)

Corporate Tax Revenue Buoyancy. This brief analyzes the growth pattern of the Georgia corporate income tax over time and the factors that have influenced this growth. (July 2009)

Forecasting the Recession and State Revenue Effects. This brief presents information regarding the degree to which macroeconomic forecasters anticipated the timing and magnitude of the present recession and whether the significant decline in state revenues that has resulted might have been better anticipated. (June 2009)

Georgia's Brain Gain. This brief investigates trends in the interstate migration of young college graduates. (March 2009)

The Value of Homestead Exemptions in Georgia. This brief estimates the total property tax savings, state-wide, to homeowners arising from homestead exemptions: examples and descriptions are provided. (March 2009)

Comparison of Georgia's Tobacco and Alcoholic Beverage Excise Tax Rates. This brief provides a detailed comparison of excise tax rates across the United States. (March 2009)

Buoyancy of Georgia's Sales and Use Tax. This brief explores the growth in sales tax revenue relative to the growth of the state's economy. (March 2009)

Buoyancy of Georgia's Personal Income Tax. This brief analyzes the growth in Georgia's Income Tax and explores reasons for trends over time. (March 2009)

Growth and Local Government Spending in Georgia. This report is a technical analysis that estimates the effect of local government spending on economic growth at the county level in Georgia. (February 2009)

Georgia Revenues and Expenditures: An Analysis of Their Geographic Distribution. This report presents a geographic analysis of "who bears the burden" of state taxes and who benefits from state public expenditures. (February 2009)

Trends in Georgia Highway Funding, Urban Congestion, and Transit Utilization. This report examines transportation funding, as well as urban congestion and transit utilization in Georgia as well as six other states for fiscal years 2000 and 2005. (October 2008)

Options for Funding Trauma Care in Georgia This report examines several options for funding trauma care in Georgia through dedicated revenue sources, with the objective of raising approximately $100 million. (October 2008)

Distribution of the Georgia Corporate and Net Worth Tax Liabilities, 1998 and 2005. This brief illustrates the distribution of corporate and net worth income tax liabilities among Georgia corporations. (September 2008)

The Effect of Insurance Premium Taxes on Employment. This report provides estimates of the effect of the insurance premium taxes on state-level employment in the insurance industry. (September 2008)

Variation in Teacher Salaries in Georgia. This report documents the variation in K-12 public school teacher salaries in Georgia and discusses the causes of variation in teacher salaries within and across districts. (August 2008)

A Brief History of the Property Tax in Georgia. This report is a chronology of the development of the property tax system that currently exists in Georgia from the 1852 legislation pointing out significant changes made over the past 156 years. (August 2008)

Estimates of the Effects on Property Tax Expansion Under Assessment Caps Proposed in HR 1246. This report estimates the effect of assessment caps proposed in HB 1246 on county, school district, and city tax base growth. (July 2008)

By the Numbers: Property Taxes in Georgia. This report presents data on the property tax in Georgia, considering the growth in property tax base and property tax revenue, how the tax base varies by county, changes over time, and property taxes by type of government. (June 2008)

Property Tax Limitations. This report discusses property tax limitations in the U.S. and highlights limitations imposed in Georgia. (June 2008)

An Analysis of a Need-Based Student Aid Program for Georgia. This report explores issues associated with establishing a need-based student aid program in Georgia. (May 2008)

A Closer Look at Georgia's Veteran Population. This brief compares demographic information on Georgia's veteran population with that of the rest of the country. (May 2008)

Tracking the Economy of the City of Atlanta: Past Trends and Future Prospects. This report explores the changes in the level and composition of employment in the City of Atlanta over the last 25 years. (May 2008)

Georgia's Immigrants: Past, Present, and Future. This report examines the economic success of immigrants relative to the state's residents as a whole and speculates on how we might expect immigrant populations to fare in the future. (April 2008)

Property Tax in Georgia. This report discusses the structure of the property tax in Georgia and various provisions that make up the structure of the property tax. (March 2008)

A Targeted Property Tax Relief Program for Georgia. This report describes how a targeted property tax relief program could be designed and provides estimates of the cost and distribution of program benefits. (February 2008)

A Historical Comparison of Neighboring States with Different Income Tax Regimes. This report focuses on simple historical differences between states without an income tax and neighbor states with an income tax. (November 2007)

Replacing All Property Taxes: An Analysis of Revenue Issues. This brief discusses the amount of revenue needed to replace all property taxes in Georgia. (October 2007)

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base. This report provides revenue estimates for alternative combination of eliminating sales tax exemptions and adding services to the sales tax base. (October 2007)

Report on the City of South Fulton: Potential Revenue and Expenditures (Revised). This report evaluates the fiscal consequences of incorporating a new city of South Fulton, using Fulton County revenue and expenditure data and benchmarks from other Georgia cities. (October 2007)

Report on the City of Chattahoochee Hill Country: Potential Revenues and Expenditures. Using Fulton County revenue and expenditure data and benchmarks developed from other Georgia city data, this report evaluates the fiscal consequences of incorporating a new city of Chattahoochee Hill Country. (October 2007)

Selected Fiscal and Economic Implications of Aging. This report considers pressures and potential benefits of an increased elderly population in Georgia. (October 2007)

Subnational Value-Added Taxes: Options for Georgia. This report considers the implications of levying a subnational value-added tax in Georgia as a replacement for the state corporate income and sales tax. (September 2007)

Distribution of State and Local Government Revenue by Source. This brief compares the reliance on various revenue sources across Georgia compared with eight other states. (September 2007)

For a free copy of any of the publications listed, call the Fiscal Research Center at 404/413-0249, or fax us at 404/413-0248. All reports are available on our webpage at: frc.gsu.edu.

Document Metadata

This document was retrieved from IssueLab - a service of the Foundation Center, http://www.issuelab.org

Date information used to create this page was last modified: 2014-02-15

Date document archived: 2010-05-20

Date this page generated to accompany file download: 2014-04-15

IssueLab Permalink:
http://www.issuelab.org/resource/household_tax_burden_effects_from_replacing_ad_valorem_taxes_with_additional_sales_tax_levies_brief

Household Tax Burden Effects from Replacing Ad Valorem Taxes with Additional Sales Tax Levies - Brief

Publisher(s): Fiscal Research Center of the Andrew Young School of Policy Studies

Author(s): Richard R. Hawkins

Date Published: 2009-08-01

Rights: Copyright 2009 Fiscal Research Center of the Andrew Young School of Policy Studies

Subject(s): Community and Economic Development; Government Reform